

Job No.750001

Annual Environmental Monitoring Report Of

Talcher Coalfields

For
2017-18

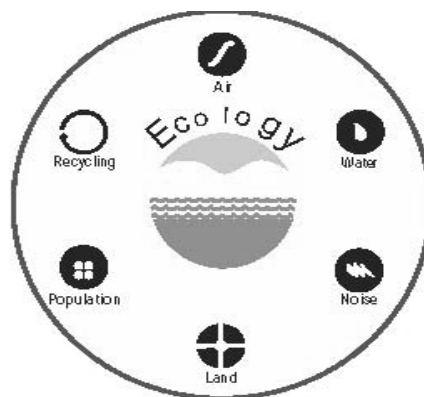


MCL

Mahanadi Coalfields Limited

(A Subsidiary of Coal India Ltd.)

P.O. – Jagruti Vihar, Burla, Sambalpur – 768020



cmpdi
A Mini Ratna Company

Central Mine Planning & Design Institute Ltd.

(A Subsidiary of Coal India Ltd.)

REGIONAL INSTITUTE- VII, PO: RRL,

SAMANTAPURI, BHUBANESWAR – 751013 (Orissa)

[Assistance from Environment Division, CMPDI (HQs), Ranchi]



CONTENTS

INTRODUCTION	1
LIST OF ENVIRONMENTAL QUALITY MONITORING STATIONS.....	5
FREQUENCY OF MONITORING	15
METHODOLOGY AND INSTRUMENTS USED.....	16
TABLES FOR AIR QUALITY DATA.....	18
TABLES FOR NOISE LEVEL MONITORING DATA	120
TABLES FOR EFFLUENT WATER QUALITY DATA.....	207
TABLES FOR SURFACE WATER QUALITY DATA	279
TABLES FOR WELL WATER LEVEL DATA	302
TABLES FOR DRINKING WATER QUALITY DATA.....	312
TABLES FOR PIEZOMETER WATER QUALITY DATA	372

INTRODUCTION

TALCHER COALFIELD

The state of Odisha is one of the top mineral rich states of the country where development of mining industry holds great promise for the growth of the state, country and its people. The state is endowed with a variety of mineral resources, coal being a major one. It has two important coalfields of the country, namely Talcher and Ib-valley coalfield.

Talcher coalfield is the largest repository of power grade coal in India. It occupies a basin in the south-eastern part of the Mahanadi Valley belt of Gondwana Basin and covers an area of about 1800 sq.kms and is located mainly in Angul district of Orissa. It is located between longitudes 20 degree 53 minute to 21 degree 12 minute North and longitudes 84 degree to 85 degree 23 minute East. The strike length of the coalfield in east-west direction is about 80 kms and the width in north-south direction is about 26 Kms. The total area of the coalfield is about 1800 sq.kms.

Talcher coalfield is strategically located to supply power grade coal to other parts of the country, especially to southern and western India power houses. The coalfield is situated near Cuttack-Sambalpur railway line, which is linked to Howrah-Chennai and Howrah-Mumbai railway line. It is only 192 kms away from a major port in the eastern coast of Odisha i.e. Paradeep port. Railway link is available between Talcher and Paradeep-via-Cuttack. Talcher and Dhamra port, Talcher coalfield is also favorably located for consumers of Southern and western India itself where coal can be transported either by rail or rail cum sea route.

HISTORY OF EXPLORATION IN TALCHER COALFIELD

The occurrence of coal in the coalfield was known as early as 1837, when first systematic search for coal was done by Blandford Brothers. The public works department of the Govt. had dug out 80 tonnes of coal from six shafts sunk in the year 1875 from Gopalprasad area.

L.L. Firmer examined Gopalprasad area in 1918. M/s Villiers Ltd. took up drilling in the eastern part of the basin in early twenties, as a result of which coal seams (seam-I), in working thickness range, were discovered in Karharbari formations and underground mines in Deulbera, Talcher and Handidua were started.

Indian Bureau of Mines (IBM) and erstwhile National Coal Development Corporation (NCDC) undertook detailed exploration by drilling in the eastern part of the coalfield in late fifties. Geological Survey of India carried out regional exploration in the central part of the coalfield in 1963-65. Around this time Gopalprasad and its adjoining blocks received attention. During the period 1971-75, northern and western areas of Nandira i.e. Bharatpur and Kalinga blocks were explored.

The regional exploration brought to the light occurrence of many thick younger coal seams in Barakar formations. These seams were of power grade coal, quality varying from grade E to G.

To develop the area for supplying power grade coal to east coast and southern power houses, Ministry of Energy decided to intensify prospecting of the area in 1980. To speed up exploration, external Govt. agencies like MECL (Mineral Exploration Corporation) and Directorate of Mining and Geology, Govt. of Orissa, were also engaged.

HISTORY OF MINING IN TALCHER COALFIELD

Underground mines in seam-I were started in twenties as mentioned earlier. Consequent to exploration by NCDC in Fifties, South Balanda OCP (1.0 Mty) and Nandira underground mines were planned for production of C/D grade coal in sixties. Coal from South Balanda was initially planned for supply to Talcher Power Station of OSEB, located nearby, by cross country transport system over a distance of about 10 kms.

Fertilizer Corporation of India (FCI) opened up coal based fertilizer plant near South Balanda. Total coal from South Balanda and Nandira were linked to FCI for movement by road/ belt conveyors. As an alternative, Jagannath OCP (2.0 Mty) was opened by NCDC to supply power grade coal to Talcher thermal power station of erstwhile Orissa State Electricity Board (OSEB). As the demand of power grade coal increased over the years, rail transport to southern power houses started from Jagannath OCP through Balanda and Jagannath sidings and the production capacity of the project was enhanced to 3.0 Mty and then to 4.0 Mty and now to 6.0 Mty.

Jagannath OCP sanctioned amount 6.0 Mty now producing 3.60 Mty.

To supply coal to Thermal Power Station (6x120mw) of NALCO, near Angul, Bharatpur OCP was opened in 1985. Bharatpur OCP Expansion Ph – III sanctioned capacity 20.0 is producing 15.03 Mty.

To supply coal to Super Thermal Power Station of NTPC (6x500 MW) located at Kaniah, Lingaraj OCP had been taken up for operation in 1991. Coal from Lingaraj to NTPC, Kaniah is being transported by MGR covering a distance of around 22kms. Lingaraj OCP Expansion Ph –III sanctioned capacity 16 Mty is producing 14.288 Mty..

Kalinga OCP (now renamed as Balram OCP) was opened in 1991 to supply coal to North Madras and Tuticorin power houses by rail. Balaram OCP sanctioned capacity 8.00 Mty producing 2.37 Mty.

Ananta OCP Expansion Ph-II sanctioned capacity 15 Mty is producing 4.15 Mty. This was started in 1988 for supply of coal to power station of Vizag Steel Plant at Vizag and charge chrome project of ICCL at Choudwar. This coal is being transported by rail system from colliery siding.

Chhendipada OCP, a pilot project of 0.35 Mty capacity was approved in 1997 near Chhendipada to develop the north western part of the coalfield and is exhausted.

Hingula II Expansion, Phase – III (15 Mty) was approved in 1999 to supply coal to Thermal Power Stations of Southern India is producing 7.6 Mty.

Bhubaneswari (20.0 Mty) and Kaniha OCP (10.0 Mty) were formulated subsequently to meet the growing demand of coal from the coalfield. Both Bhubaneswari and Kaniha OCPs are running mines.

All the above mines are being operated by MCL, a subsidiary of CIL. Not a single captive block mine has yet been operational.

LOCATION

Talcher coalfield constitutes the south-eastern most part of the Lower Gondwana basins within the Mahanadi Valley graben bounded by Latitude 20⁰53' to 21⁰12' N and Longitude: 84⁰ to 85⁰23'E.

The major part of the coalfield including the present coal mining area falls in Angul district. Brahmani River falls in Dhenkanal district. A part of the coalfield in the north lies in Deogarh district.

COMMUNICATION

The southeastern part of the coalfield where all the coal mining activities are taking place at present, is connected by rail to Bhubaneswar (150 Km.) - the capital city of Odisha and located on Howrah-Chennai main railway line. It is also connected by rail and road to Paradeep port. National Highway No.42 connecting Cuttack-Angul- Sambalpur passes more or less parallel to the southern fringe of the coalfield at about 5 to 7 Km. NH-23 connecting Talcher-Samal-Pallahara passes through the eastern part of the coalfield. Another prominent district road is Angul-Chhendipada-Deogarh road passing through the central part of the coalfield. NH-200 originating from Chandikhol, also passes through north eastern part of the coalfield and joins with NH-23.

The coalfield is also suitably connected by railway network. Sambalpur-Talcher rail link, the connector to Howrah-Mumbai and Howrah-Chennai main railway lines, runs almost parallel to NH-42 and passes across the study area in east-west direction. The rail link carries heavy goods traffic of the industrial and mining activities of the region to the main network lines which are accessible at about 100-150 km distance from Talcher.

TOPOGRAPHY AND DRAINAGE

Topographically the coalfield can be divided in two parts - eastern part and the western part. The eastern part largely covered by Barakar Formation (or Lower Kamthi Formation), is slightly undulating with an average elevation of around 150m above MSL. The western part comprises largely of steeply sloping Kamthi hillocks. Minimum and maximum elevation from MSL is 60m and 567m respectively for the coalfield. The terrain is undulating and accommodates large number of villages and fertile lands. The soil in this area varies from rich loams to the gravelly detritus of the hill slopes.

The coalfield is drained by the Brahmani River flowing along eastern fringe of the coalfield. Singhadajhor, Nandira and Tikra, Aunli are some of the important tributaries of the Brahmani River.

CLIMATE AND RAINFALL

The climate of the area is generally dry and arid except in monsoon season. It is influenced by prevalence of dry air of the continental type. It is characterized by extreme conditions, summers being intensely warm and winters rather cold. The summer is severe during May-June when temperature rises as high as 49^oC accompanied by high humidity. Winter is very pleasant, prevails during December-January. The area experiences warm to hot climate with temperature varying from 9.9^oC to 44.4^oC. Average humidity varies from 26% to 83%. Generally the humidity is highest in August and least in March. The climate of this region resembles with that of Deccan plateau.

Annual mean wind velocity is 7 Km/hr. with maximum speed of more than 20 Km/hr. It is generally observed that the wind speed in the area is light to moderate except in the early monsoon period when it is generally strong. Higher speed wind blows during latter part of summer or rainy season in the direction of South-West or North- East. Winds blow with slow or moderate speed in rest part of the year. In winter the winds blow either from West or North. Frequent variation in wind speed takes place only in summers.

The area has monsoon type climate with rain fall predominantly in the months of June to September and some in the other months. Average rainfall per annum is 1329 mm. Maximum rainfall per annum is 2200 mm and minimum is 700 mm as per records available.

LIST OF ENVIRONMENTAL QUALITY MONITORING STATIONS

Table 01
List of Air Quality Monitoring Stations

Sl. No.	Area	Project	Name of the Station	
1	Jagannath	Jagannath OCP	Jagannath OCP-Time office (A1)	
2			Jagannath Colony (A2)	
3			Near West Sump(A3)	
4			Near View Point (A4)	
5		Bhubaneswari OCP	N-E of Mine Working	
6			S-E of Mine Working	
7			Near external OB Dump	
8			B.C.M.L. Workshop	
9	Bharatpur	Bharatpur OCP	Near ETP	
10			Nakeipasi Village (4P) Weekly Twice	
			Nakeipasi Village (4P+ 8P) Fortnightly	
11			Near Civil maintenance Office of Hingula Area	
			Near View Point (A4) (Reported Only)	
			Project Office, Balaram OCP (Reported Only)	
12		Ananta OCP	Ananta OCP	Regional Store
13				Ananta Expansion Area (A1)
14				Near Talcher West Underground (A2)
15				Near Ananta OC Project Office (A3)
16				Ananta Vihar Colony
17				Chhendipada OCP
18		Near Fire Station		
19		Mamuraia Sahi		
20		Dolamandap Chhak		
21		Lingaraj	Lingaraj OCP	Lingaraj CGM Office
22	Near Shiva Temple			
23	Near C.T. Road			
24	Near North Side of Mine			
25	Kaniha	Kaniha OCP	Project Office	
26			Old Site Office	
27			NTPC Chakk, MGR (4P) Weekly Twice	
28			NTPC Chakk, MGR (8P) Fortnightly	
29	Hingula	Hingula OCP	New Time Office-Near Z-patch	
30			Village-Time Office	
			Near Project Office Hingula OCP	
31			Village-Chhotobereni (4P) Weekly Twice	
			Village-Chhotobereni (8P) Fortnightly	
32		Village-Kumunda (4P) Weekly Twice		
		Village-Kumunda (8P) Fortnightly		

Sl. No.	Area	Project	Name of the Station
33	Hingula	Baram OCP	Village-Natada (4P) Weekly Twice
34			Village-Natada (8P) Fortnightly
35			On Backfilled Area Near Dozer Shed
36			Project Office, Balaram OCP
37			Village-Solada (4P) Weekly Twice
38			Village-Solada (8P) Fortnightly
39	Talcher	Talcher Colliery	GM Office
40			Near Canteen Talcher Colliery
41		Mandapal Sand Mine	Near Mandapal Hospital
42			Project Office
43		Nandira Colliery	Sub Station
44			Project Office
45		Deulbera Colliery	Sub Station
46			Project Office
47	Kakudi & Kishoripal Sand Mine	Near Kishoripal Village	
48		Near Kishoripal Village	

Table 02
List of Noise Level Monitoring Stations

Sl.no	Area	Project	Name of the Station	
1	Jagannath	Jagannath OCP	Jagannath OCP-Time Office (A1)	
2			Jagannath Colony (A2)	
3			Near West Sump(A3)	
4			Near View Point (A4)	
5		Bhubaneswari OCP	N-E of Mine	
6			S-E of Mine	
7			Near External OB Dump	
8			B.C.M.L. Workshop	
9	Bharatpur	Bharatpur OCP	On Backfill, Near Rejects Dump Yard	
10			Padmabatipur Village.	
			Near View point (A4) (Reported only)	
			Project Office, Balaram OCP (Reported only)	
11			Near Civil maintenance Office of Kalinga Colony/Pressure filter	
12		Ananta OCP	Ananta Expansion Area (A1)	
13			Near Talcher West Underground (A2)	
14			Near Ananta OC Project Office(A3)	
15			Ananta Vihar Colony	
16		Chhendipada OCP	Near Site Office	
17			Near Mine Working	
18			Near Weigh Bridge	
19		Lingaraj	Lingaraj OCP	Lingaraj CGM Office
20				Near Shiva Temple
21				Near C.T.Road (Lingaraj to Dera)
22				Near North Side of Mine
23		Kaniha	Kaniha OCP	Site Office
24				Telisingha Village
25	Patharmunda Village			
26	Near Jarda Village			
27	Hingula	Hingula OCP	Village-Time Office	
28			Near Project Office	
29			Village-Chhotobereni	
30			Village-Kumunda	
31	Balaram	Balaram OCP	Natada Village	
32			On Backfilled Area Near Dozer Shed	
33			Project Office, Balaram OCP	
34			Solada Village	
35	Talcher	Talcher Colliery	GM Office	
36			Canteen, Talcher Colliery	
37		Mandapal sand mine	Near Gopinathpur Village	
38		Nandira Colliery	Project Office	
39			Sub- Station, Nandira Colliery	
40		Deulbera Colliery	Manager's Office	
41			Deulbera Colony	
42		Kakudi & Kishoripal Sand mine	Near Kishoripal Village	

Table 03
List of Effluent (22 Parameter) Quality Monitoring Stations

S.NO	Area	OCP/Colliery	NAME OF STATION	
1.	Jagannath	Jagannath	West Sump Water	
2.			Central Sump Water	
3.		Bhubaneswari	Mine Sump Water	
4.	Bharatpur	Bharatpur	Mine disch.before pt.of confl.with Bangaru nulla	
5.		Ananta	Mine disch. Water	
6.		Chhendipada	Mine discharge water	
7.	Lingaraj	Lingaraj	Outlet of MDTP	
8.	Kaniha	Kaniha	Outlet of MDTP id dusch outside	
9.	Talcher	Talcher	Talcher colliery Sedimentation Tank discharge	
10.		Nandira	Nandira colliery Sedimentation Tank discharge	
11.		Deulbera colliery	Deulbera colliery mine discharge	
12.			Rani park Submersible pump	
13.		Handhidhua Colliery	Handhidhua Colliery mine discharge	
14.		Mandpal Sand mine		Up stream -At 200 m Before leasehold Area
15.				Down stream -At 200 m Before leasehold Area
16.		Kakudi & Kishoripal Sand mine		Up stream -At 200 m Before leasehold Area
17.				Down stream -At 200 m Before leasehold Area

Table 04
List of Effluent (4 Parameter) Quality Monitoring Stations

S.NO	Area	OCP/Colliery	NAME OF STATION
1.	Jagannath	Jagannath	MDTP Inlet
2.			MDTP Outlet
3.			O & G Trap Inlet
4.			O & G Trap Outlet
5.		Bhubaneswari	ETP Inlet (pH, TSS, COD, O&G)
6.			ETP Outlet (pH, TSS, COD, O&G)
7.	Bharatpur	Bharatpur	Mine discharge at point of confluence with Bangaru Nulla
8.			O & G Trap Outlet
9.		Ananta	Mine Discharge Water
10.			O & G Trap Outlet
11.			O&G trap Inlet
12.			Lingaraj
13.	Lingaraj	Outlet of O&G Trap	
14.	Kaniha	Kaniha	Outlet of MDTP, if disch outside
15.	Hingula	Hingula	Mine Sump Water
16.			Inlet of O & G Trap
17.			Outlet of O & G Trap
18.		Balram	Outlet of O & G Trap
19.			Mine Sump Water
20.			O & G Inlet
21.	Talcher	Talcher	Talcher colliery Sedimentation Tank Discharge
22.		Nandira	Nandira colliery Sedimentation Tank Discharge
23.		Duelbera colliery	Ranipark Dubmersible Pump
24.		Handhidhua Colliery	Handhidhua Colliery Mine Discharge
25.		Mandalpal sand Mine	Upstream -At 200 m Before Leasehold Area
26.			Downstream -At 200 m Before Leasehold Area
27.		Kakudi & Kishoripal Sand mine	Upstream -At 200 m Before Leasehold Area
28.			Downstream -At 200 m Before Leasehold Area

Table 05
List of Effluent (3 Parameter) Quality Monitoring Stations

S.NO	Area	OCP	NAME OF STATION
1	Jagannath	Jagannath	DETP/STP INLET
2			DETP/STP OUTLET
3	Bharatpur	Bharatpur	DETP/STP OUTLET
4			DETP/STP INLET
5		Ananta	DETP/STP OUTLET
6			DETP/STP INLET
7	Hingula	Balram	DETP/STP OUTLET of Balram Colony

Table 06
List of Effluent (1 Parameter) Quality Monitoring Stations

S.NO	Area	OCP	NAME OF STATION
1	Bharatpur	Ananta	Mine Sump Water
2	Lingaraj	Lingaraj	Mine Sump Water

Table 07
List of Drinking Water Quality Monitoring Stations

SL.NO	AREA	OCP/UG MINE	NAME OF OCP/UG MINE
1	Jagannath	Bhubaneswari	Project site office water monthly
2		Bhubaneswari	Naraharipur village Tube well water
3		Jagannath	Rakas vill. Well water yearly once
4		Jagannath	Balanda colony tap water
5		Jagannath	Jagannath Colony tap water monthly
6	Bharatpur	Ananta	Ananta colony tap water
7		Ananta	Hensmul village Well water Yearly
8		Ananta	Dera village Tube well water yearly
9		Bharatpur	Tap water in Nehru Satabdi nagar
10		Bharatpur	Badasinga village)
11		Bharatpur	Time office, BOCP
12		Chhendipada	Bore well water at site office
13	Hingula	Balram	Danara Village borewell water
14		Balram	Balaram Colony tap water
15		Balram	Nakeipasi village bore well water
16		Hingula	Time office water
17		Hingula	Gopalprasad village bore well water
18		Hingula	Kumunda village bore well water
19	Kaniha	Kaniha	Project office tube well water
20		Kaniha	Jarda village
21	Lingraj	Lingraj	Well from Balunga khamar Village
22		Lingraj	Well from Deulbera Village
23		Lingraj	Well from Talabera
24		Lingraj	MTK Office tap water, LOCP
25		Lingraj	Lingraj township tap water
26		Lingraj	Tap water GM Office
27		Lingraj	Deulbera colony tap water
28		Lingraj	Deulbera tap water
29	Talcher	Talcher Colliery	Canteen tap-water , GM office
30		Talcher Colliery	Canteen tap-water, Talcher colliery
31		Nandira Colliery	Canteen tap-water
32		Nandira Colliery	Pit top tap water
33		Deulbera Colliery	Deulbera manager office tap water
34		Handhidhua Colliery	Pit top tap tap water

Table 08
List of Ground Water Level Stations

SL. NO	AREA	OCP/UG MINE	NAME OF OCP/UG MINE
1	Bharatpur	Ananta	Hensmul village Well water
2			Dera village Tube well water
3	Hingula	Balram	Danara Village Well water
4			Nakeipasi Village Well water
5		Hingula	Gopal Prasad Village
6			Kusumpal Village
7	Lingraj	Lingraj	Balunga Khamar Village well
8	Talcher	Talcher Colliery	Narharipur village well
9		Nandira Colliery	Natedi Village
10		Deulbera Colliery	Deulbera village well
11			Pumping station 1, GW level & quantity

Table 09
List of Surface Water Monitoring Stations

SL.No.	AREA	OCP	NAME OF STATION	
1	Jagannath	Bhubaneswari	Bangarujhor stream near <u>Sareila</u> / <u>Khaisa pala</u> village as d/s water of Bhubaneswari OCP before joining Brahmani river.	
2			Bangarujhor stream near <u>Sareila</u> / <u>Khaisa pala</u> village as d/s water of Bhubaneswari OCP before joining Brahmani river.	
3			Pond water of Madanmohanpur	
4	Bharatpur	Ananta	Bangaru jhor river near <u>Joragarhia</u> / <u>Banapalli</u> as u/s water of point of confluence of Ananta OCP	
5			Bangaru jhor river near <u>Joragarhia</u> / <u>Banapalli</u> as u/s water of point of confluence of Ananta OCP	
6			Bangarujhor river near <u>Raghunathpur</u> / <u>Jilinda</u> village as d/s water of Ananta OCP	
7			Bangarujhor river near <u>Raghunathpur</u> / <u>Jilinda</u> village as d/s water of Ananta OCP	
		Bharatpur	#Bangaru Jhor river near <u>Joragarhia</u> / <u>Banapalli</u> as d/s water of point of confluence of Bharathpur OCP (Reported only , Charged to Ananta OCP)	
			#Bangaru Jhor river near <u>Joragarhia</u> / <u>Banapalli</u> as d/s water of point of confluence of Bharathpur OCP (Reported , only , Charged to Ananta OCP)	
10			Bangarujhor river near <u>Telepasi</u> / <u>Solada</u> village as u/s water of Bharathpur OCP	
11		Bangarujhor river near <u>Telepasi</u> / <u>Solada</u> village as u/s water of Bharathpur OCP		
12		Lingraj	Lingraj	Village pond near Deulbera siding
13		Kaniha	Kaniha	Singada jhor stream nearer to village <u>Khairnali</u> / <u>Bhagirathipur</u> as u/s water for Kaniha OCP
14				Singada jhor stream nearer to village <u>Khairnali</u> / <u>Bhagirathipur</u> as u/s water for Kaniha OCP
15	Before Junction point of Singadajhor & Brahmani river at Balangi village as d/s for Kaniha OCP			
16	Tikra nadi near Kaniah village as u/s water for Kaniah OCP			
17	Tikra nadi near Shagarhi Pala village as d/s water for Kaniah OCP			
18	Hingula	Hingula	Singadhajhor stream near HOCP	
19			Pond water of Kankarei village	
20		Balaram	Derjenga reservoir as a part of impact study	
21	Pond water of Ambapal village			
22	Talcher	Talcher	Pond water of Dera village	
23		Nandira	Nandira Jhor near <u>Karnapur</u> village	
24			Nandira Jhor near <u>Sakasingha</u> village	
25			Nandira Jhor near <u>Tentolei</u> village mine	
26			Nandira Jhor near <u>Pengua</u> village mine	
27	Deulbera	Pond water of Gopinathpur village		

Table 10
List of Piezometer Monitoring Stations

Sl. No.	AREA	OCP/UG MINE	NAME OF OCP/UG MINE
1	Jagannath	Bhubaneswari	Piezometer no MTP 07
2			Piezometer no MTP 08
3		Jagannath	Piezometer no MTP 04 (Reported Only)
4	Bharatpur	Ananta	Piezometer no MTP 04
5			Piezometer no MTP 05
6		Bharatpur	Piezometer no MTP 09
7		Chhendipada	Piezometer no MTP 21
8			Piezometer no MTP 22
9			Piezometer no MTP 23
10		Hingula	Balram
11	Piezometer no MTP 12		
12	Piezometer no MTP 13		
13	Piezometer no MTP 17		
14	Hingula		Piezometer no MTP 14
15			Piezometer no MTP 15
16			Piezometer no MTP 16
17			Kaniha
18	Piezometer no MTP 19		
19	Piezometer no MTP 20		
20	Lingraj	Lingraj	Piezometer no MTP 01
21			Piezometer no MTP 02
22			Piezometer no MTP 06
23	Talcher	Nandira Colliery	Piezometer no MTP 11
24		Handhidhua Colliery	Piezometer no MTP 03

FREQUENCY OF MONITORING

Table 11: Frequency of Monitoring

Sl. No.	Parameters	Sampling Frequency
1.	Air (5 Parameter) Quality Monitoring	Fortnightly
2.	Noise level (Day & Night) Monitoring	Fortnightly
3.	Effluent (1 Parameter) Quality Monitoring	Quarterly
4.	Effluent (4 & 3 Parameter) Quality Monitoring	Fortnightly/Monthly/ Quarterly
5.	Effluent (22 Parameter) Quality Monitoring	Yearly
6.	Drinking Water(26 Parameter) Quality Monitoring	Monthly
7.	Piezometer & Ground Water Level Monitoring	Quarterly
8.	Surface Water (21 Parameter) Quality Monitoring	Quarterly

METHODOLOGY AND INSTRUMENTS USED

Table 12: Methodology & Instruments used for Air Quality Analysis

No.	Parameters	Method	Instruments
1.	SPM and PM ₁₀	IS:5182 (Part-23):2006 Cyclonic Flow Technique, Gravimetric Method	Respirable Dust Sampler, Electronic Balance
2.	PM _{2.5}	Guideline for the measurement of Ambient Air Pollutants, Volume –I, May 2011	PM 2.5 Sampler, Micro Balance
3.	SO ₂	IS:5182 (Part-2):2001, Improved West and Gaeke Method	Spectrophotometer, Respirable Dust Sampler with Impinger Box
4.	NO _x	IS:5182 (Part-6):2006, Jacob &Hoccheiser Modified Method	Spectrophotometer, Respirable Dust Sampler with Impinger Box

Table 13: Methodology & Instruments used for Noise level Monitoring

Sl.	Parameters	Method	Instruments
1.	Ambient Noise Level dB (Leq)	Protocol for Ambient Level Noise Monitoring, July 2015, CPCB	Weighted sound level i.e. dB(A) Meter

Table 14: Methodology & Instruments used for Drinking/Surface/Effluent Water Quality Analysis

Sl. No.	Parameters	Method	Instruments
Physical Parameter			
1.	PH	IS 3025 (PART 11) : 1983 , Electrometric	pH meter
2.	Turbidity	IS 3025 (PART10) : 1984, Nephelometric	Nepheloturbidity meter
3.	Temperature	IS 3025 (PART 09) : 1984, Thermometric	Temperature Probe
4.	Taste	IS 3025 (PART 07) : 1984, Physical	-
5.	Odour	IS 3025 (PART 05) : 1983 , Physical	-
6.	Colour	IS: 3025 (Part - 4): 1983, Visual Comparison	-
7.	Total suspended solids	IS 3025 (PART 17) : 1984, Gravimetric	Hot Air Oven, Electronic balance
8.	Total dissolved solids	IS 3025 (PART 16) : 1984, Gravimetric	Hot Air Oven, Electronic balance
In organic Parameters			
9.	Nitrate	APHA 22nd Edition	Microprocessor based spectrophotometer-
10.	Nitrate nitrogen	APHA 22nd Edition	Microprocessor based spectrophotometer-
11.	Ammonical Nitrogen	IS 3025 (PART 34) : 1988,	Microprocessor based spectrophotometer-
12.	Total kjeldhal Nitrogen	IS 3025 (PART 34) : 1988	Microprocessor based spectrophotometer-
13.	Total residual chlorine	IS 3025 (PART 26) : 1986	Microprocessor based spectrophotometer-
14.	Calcium	IS 3025 (PART 40) : 1991,EDTA Titrimetric	Burette, Pipette
15.	Chloride	IS 3025 (PART 32) : 1988,	Microprocessor based spectrophotometer-
16.	Fluoride	APHA 22nd Edition , IS 3025(Pat 60):SPANDS	Microprocessor based spectrophotometer-
17.	Total Alkalinity	IS 3025 (PART 23) : 1986, Titration Method	Burette, Pipette
18.	Total hardness	IS 3025 (PART 21) : 1983, EDTA Volumetric	Burette, Pipette
19.	Dissolved phosphate	APHA 22nd Edition , IS 3025 (Pat 31): 1988	Microprocessor based spectrophotometer-
20.	DO	IS 3025 (PART 38) : 1989, Winkler Azide Method	Burette, Pipette
21.	Sulfate	APHA 22nd Edition , IS 3025(Part 24): 1986,	Microprocessor based spectrophotometer-
22.	Sulfide	APHA 22nd Edition , IS 3025(Part 29):1986	Microprocessor based spectrophotometer-
Trace Metals			
23.	Arsenic	APHA 22nd Edition , AAS-GTA Method	Atomic Absorption Spectrophotometer(AAS)
24.	Lead	APHA 22nd Edition , AAS-GTA Method	Atomic Absorption Spectrophotometer(AAS)
25.	Hexavalent chromium	APHA 22nd Edition	DR 2800
26.	Total Chromium	IS 3025 (PART 52) : 2003,AAS-Flame Method	Atomic Absorption Spectrophotometer(AAS)
27.	Copper	IS 3025 (PART 42) : 1992, AAS-Flame Method	Atomic Absorption Spectrophotometer(AAS)
28.	Zinc	IS 3025 (PART 49) : 1994, AAS-Flame Method	Atomic Absorption Spectrophotometer(AAS)
29.	Selenium	IS 3025 (PART 56) : 2003,AAS-VGA Method	Atomic Absorption Spectrophotometer(AAS)
30.	Cadmium	APHA 22nd Edition ,AAS-GTA Method	Atomic Absorption Spectrophotometer(AAS)
31.	Nickel	IS 3025 (PART 54) : 2003,AAS-Flame Method	Atomic Absorption Spectrophotometer(AAS)
32.	Manganese	APHA 22nd Edition ,AAS-Flame Method	Atomic Absorption Spectrophotometer(AAS)
33.	Iron	IS 3025 (PART 53) : 2003,AAS-Flame Method	Atomic Absorption Spectrophotometer(AAS)
34.	Boron	APHA 22nd Edition , Carmine Method	DR 2800
General Organics & Trace Organics			
35.	COD	APHA 22nd Edition ,Titration Method	COD Digester
36.	O&G	IS 3025 (PART 39) : 1991, Partition gravimetric	Hot Air Oven, Electronic Balance
37.	BOD	IS 3025 (PART 44) : 1993.3 day incubation	BOD Incubator
38.	Phenolics	APHA 22nd Edition ,4- Amino antipyrene Method	-
Microbiological Tests			
39.	Total coliform	MPN Test	LTEK MPN Kit

TABLES FOR AIR QUALITY DATA

Table: 15

**Area: Jagannath Area
 Project: Jagannath OCP
 Monitoring Station: Jagannath OCP-Time Office**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
13-04-2017	44	194	4.32	<6	516	Sunny
25-04-2017	31	378	2.41	<6	806	Sunny
12-05-2017	35	187	2.6	<6	465	Sunny
29-05-2017	40	204	2.03	<6	509	Sunny
13-06-2017	21	83	4.71	<6	179	Sunny
22-06-2017	28	66	3.48	<6	127	Cloudy & Rainfall
12-07-2017	32	79	1.73	<6	112	Evening Heavy Rainfall
26-07-2017	24	27	2.44	<6	37	Cloudy & Night Heavy Rainfall
10-08-2017	17	46	1.04	<6	108	Night Rainfall
25-08-2017	25	129	1.08	11	188	Cloudy & Rainfall
11-09-2017	26	293	1.01	<6	787	Cloudy & Evening Rainfall
25-09-2017	10	92	1.9	<6	209	Sunny
07-10-2017	35	62	3.72	4.47	159	Cloudy & Rainfall
24-10-2017	19	149	1.7	1.01	191	East to West , Sunny
10-11-2017	49	133	3.32	0.92	253	Sunny
25-11-2017	35	227	20.24	5.94	377	Sunny
08-12-2017	77	240	12.46	9.23	430	Cloudy
25-12-2017	85	182	7.07	9.88	290	Sunny
08-01-2018	33	340	1	<6	557	Sunny
22-01-2018	101	106	3.32	<6	390	Sunny
07-02-2018	49	230	0.71	10.52	521	Sunny
22-02-2018	87	351	1.05	16.85	722	Sunny
10-03-2018	42	389	5.09	11.84	785	Sunny
26-03-2018	134	260	2.12	12.92	526	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in μg/m³
Maximum	134.00	389.00	20.24	16.85	806.00	
Minimum	10.00	27.00	0.71	0.92	37.00	
Average	44.96	185.29	3.77	8.60	385.17	
95 Percentile	98.90	373.95	11.65	14.89	786.70	
98 Percentile	118.82	383.94	16.66	16.06	797.26	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 16

**Area: Jagannath Area
 Project: Jagannath OCP
 Monitoring Station: Jagannath Colony**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
13-04-2017	31	424	3.5	<6	452	Sunny
24-04-2017	109	126	2.63	<6	283	Sunny
12-05-2017	31	67	2.2	<6	187	Sunny
29-05-2017	32	225	2.46	<6	374	Sunny
13-06-2017	11	48	3.94	<6	133	Sunny
22-06-2017	13	74	4.73	<6	125	Cloudy & Rainfall
12-07-2017	46	65	2.29	<6	86	Evening Heavy Rainfall
26-07-2017	7	24	1.87	18	31	Cloudy & Night Heavy Rainfall
10-08-2017	32	37	1.02	<6	68	Night Rainfall
25-08-2017	30	33	5.35	<6	70	Cloudy & Rainfall
11-09-2017	21	93	1.23	<6	186	Cloudy & Evening Rainfall
25-09-2017	10	104	1.64	<6	238	Sunny
07-10-2017	22	46	10.77	8.57	63	Cloudy & Rainfall
24-10-2017	27	86	2.1	1.04	119	Sunny
10-11-2017	32	166	2.95	1.73	266	Sunny
25-11-2017	77	133	36.96	9.52	329	Sunny
08-12-2017	86	175	0.84	1.94	391	Sunny
25-12-2017	66	195	4.83	9.4	376	Sunny
08-01-2018	40	213	2.7	10.22	267	Sunny
22-01-2018	66	233	42.74	<6	368	Sunny
07-02-2018	34	174	0.99	<6	471	Sunny
22-02-2018	21	268	8.98	13.4	569	Sunny
10-03-2018	57	220	1.86	37.96	400	Sunny
26-03-2018	55	292	6.25	14.49	420	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	109.00	424.00	42.74	37.96	569.00	
Minimum	7.00	24.00	0.84	1.04	31.00	
Average	39.83	146.71	6.45	11.48	261.33	
95 Percentile	84.65	288.40	33.03	27.98	468.15	
98 Percentile	98.42	363.28	40.08	33.97	523.92	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 17

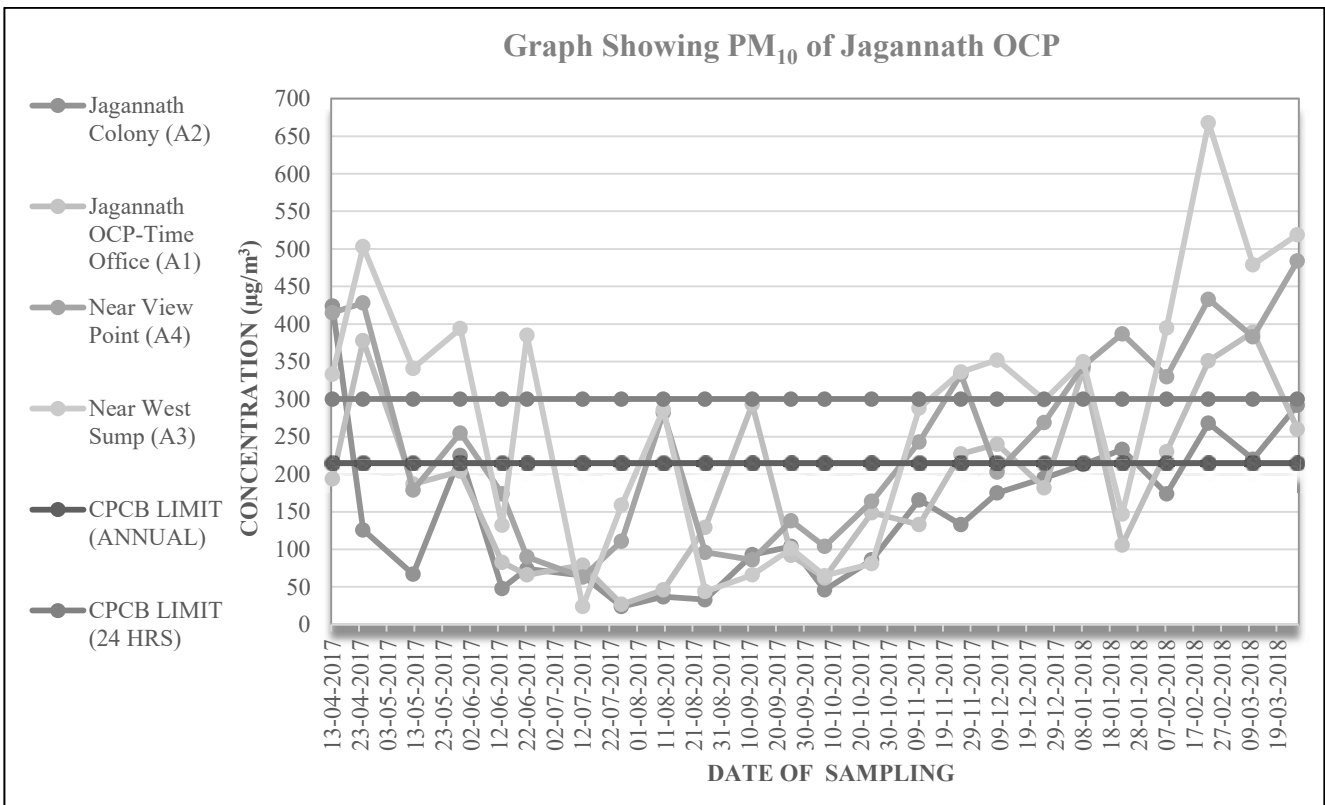
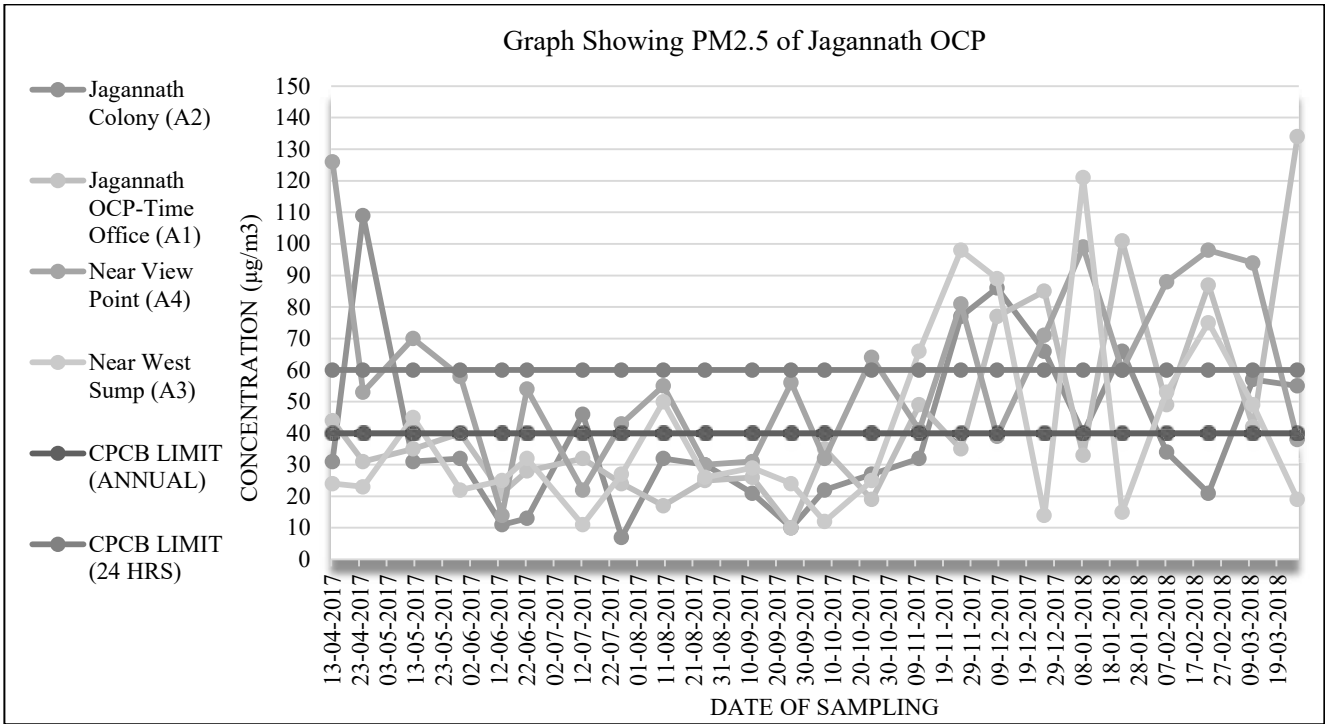
**Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Near View Point (A4)**

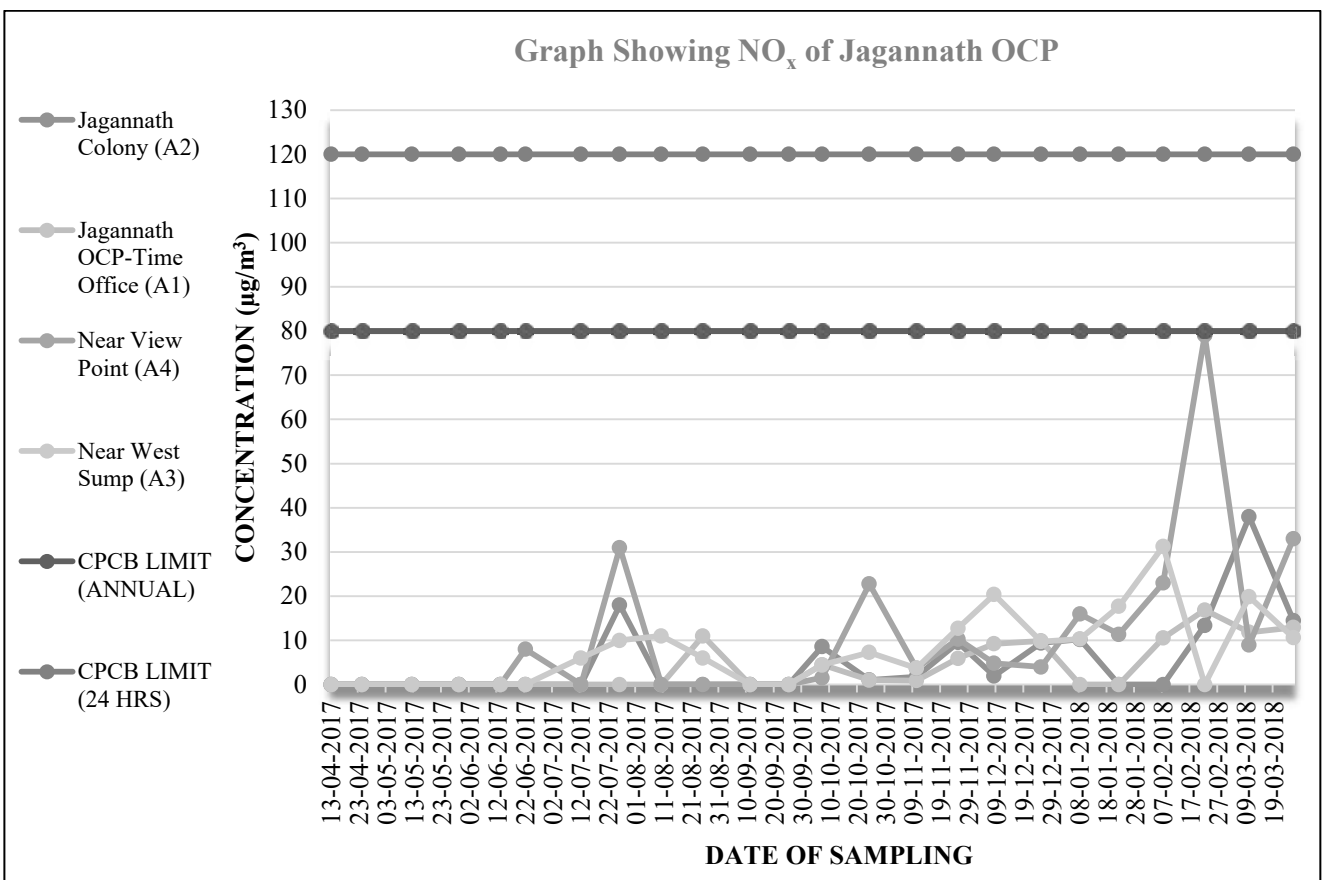
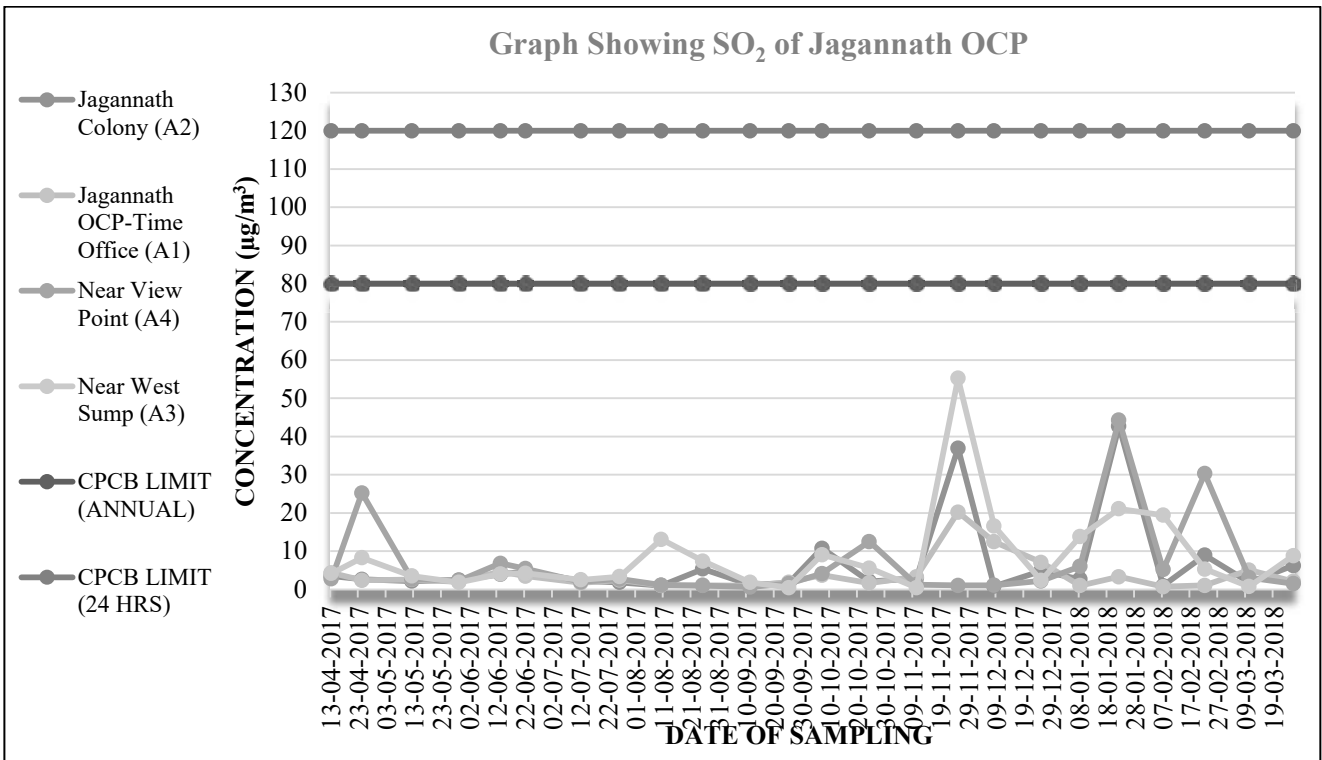
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
13-04-2017	126	415	2.78	<6	675	Sunny
24-04-2017	53	428	25.23	<6	771	Sunny
12-05-2017	70	179	2.72	<6	312	Sunny
29-05-2017	58	255	2.27	<6	516	Sunny
12-06-2017	14	174	6.82	<6	323	Sunny & Cloudy
22-06-2017	54	90	5.44	8	122	Cloudy & Rainfall
12-07-2017	22	63	1.99	<6	72	Evening Heavy Rainfall
26-07-2017	43	111	2.73	31	189	Cloudy & Night Heavy Rainfall
11-08-2017	55	282	1.16	<6	469	Sunny
28-08-2017	30	96	1.03	<6	134	Evening Heavy Rainfall
12-09-2017	31	86	0.62	<6	103	Cloudy & Night Rainfall
26-09-2017	56	138	1.53	<6	224	Sunny
07-10-2017	32	104	4.17	1.52	354	Cloudy & Rainfall
24-10-2017	64	164	12.51	22.76	234	Sunny
10-11-2017	41	243	1.25	3.7	396	Sunny
25-11-2017	81	333	1.04	10.29	683	Sunny
08-12-2017	39	203	1.08	4.83	329	Cloudy
25-12-2017	71	269	2.23	3.97	454	Sunny
08-01-2018	99	344	6.05	15.96	595	Sunny
22-01-2018	60	387	44.34	11.37	685	Sunny
08-02-2018	88	330	5.21	23	592	Sunny
22-02-2018	98	433	30.3	79.05	798	Sunny
10-03-2018	94	383	3.11	8.98	505	Sunny
26-03-2018	38	484	1.52	33	874	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	126.00	484.00	44.34	79.05	874.00	
Minimum	14.00	63.00	0.62	1.52	72.00	
Average	59.04	249.75	6.96	18.39	433.71	
95 Percentile	98.85	432.25	29.54	49.12	793.95	
98 Percentile	113.58	460.54	37.88	67.08	839.04	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 18

**Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Near West Sump (A3)**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
13-04-2017	24	333	4.21	<6	544	Sunny
24-04-2017	23	503	8.29	<6	699	Sunny
12-05-2017	45	341	3.53	<6	642	Sunny
29-05-2017	22	394	1.84	<6	848	Sunny
12-06-2017	25	132	4.09	<6	220	Sunny & Cloudy
22-06-2017	32	385	4.24	<6	831	Cloudy & Rainfall
12-07-2017	11	24	2.53	6	32	Evening Heavy Rainfall
26-07-2017	27	159	3.34	10	375	Cloudy & Night Heavy Rainfall
11-08-2017	50	286	13.1	11	609	Sunny
29-08-2017	26	44	7.4	6	57	Cloudy & Rainfall
12-09-2017	29	66	1.85	<6	110	Cloudy & Night Rainfall
26-09-2017	24	101	0.48	<6	209	Sunny
07-10-2017	12	65	9.09	4.41	151	Cloudy & Rainfall
24-10-2017	25	81	5.58	7.28	109	Sunny
10-11-2017	66	288	0.47	3.74	635	Sunny
25-11-2017	98	336	55.23	12.73	721	Sunny
08-12-2017	89	352	16.6	20.38	781	Cloudy
25-12-2017	14	299	2.36	9.72	519	Cloudy
08-01-2018	121	350	13.84	10.33	638	Cloudy
22-01-2018	15	147	21.1	17.7	383	Cloudy
07-02-2018	53	395	19.43	31.27	847	Cloudy
22-02-2018	75	668	5.34	<6	1003	Cloudy
10-03-2018	49	479	0.78	19.87	659	Sunny & PM10 Filter Paper Torn
26-03-2018	19	519	8.84	10.59	918	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	121.00	668.00	55.23	31.27	1003.00	
Minimum	11.00	24.00	0.47	3.74	32.00	
Average	40.58	281.13	8.90	12.07	522.50	
95 Percentile	96.65	516.60	20.85	23.65	907.50	
98 Percentile	110.42	599.46	39.53	28.22	963.90	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





Graph Showing SPM of Jagannath OCP

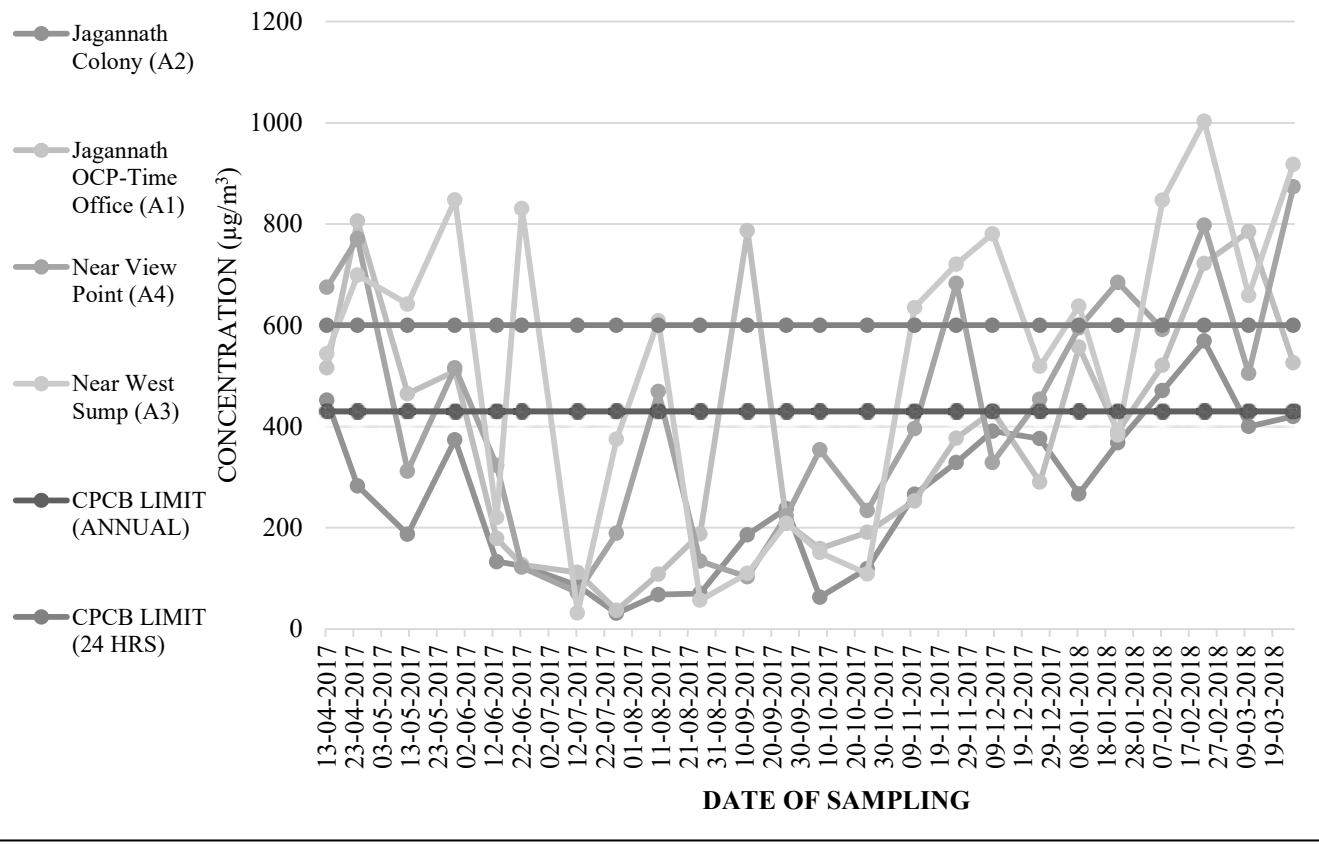


Table: 19

**Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: B.C.M.L. Workshop**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
22-04-2017	185	247	1.88	<6	352	North to south, sunny
10-05-2017	29	123	2.84	<6	145	East to West, sunny
25-05-2017	37	101	1.95	10	396	South to North, Sunny
12-06-2017	24	84	5.67	<6	181	Northeast to Southwest, Sunny & Cloudy
28-06-2017	34	45	3.48	<6	102	North to South, Cloudy
13-07-2017	28	62	12.2	13	86	West to East, Cloudy & Night Rainfall
27-07-2017	32	99	1.33	23	179	West to East , Cloudy & Evening Rainfall
10-08-2017	36	48	2.09	<6	73	South to North, Night Rainfall
25-08-2017	19	22	1.15	<6	59	South to North, Cloudy & Rainfall
11-09-2017	9	22	0.88	<6	64	North to South , Cloudy & Evening Rainfall
25-09-2017	51	79	1.23	<6	98	East to West , Sunny
12-10-2017	35	50	0.87	23.02	72	West to East, Cloudy & evening Rainfall
25-10-2017	41	115	4.39	0.6	248	East to West , Sunny
10-11-2017	34	144	3.38	0.78	162	South to North, sunny
25-11-2017	80	87	5	4.32	154	East to West , Sunny
07-12-2017	84	158	0.8	2.29	306	North to South, sunny
22-12-2017	67	155	2.75	7.67	221	North to South, Sunny
05-01-2018	29	159	0.44	<6	350	North to South, sunny
19-01-2018	37	131	16.27	<6	226	North to South,Sunny
05-02-2018	44	185	2.46	<6	299	South to North Sunny
20-02-2018	53	161	15.26	<6	325	North to South,Sunny
08-03-2018	39	180	0.51	7.83	323	North to South, sunny
23-03-2018	37	163		<6	178	South to North, Sunny & SO2 Sample rejected
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	185.00	247.00	16.27	23.02	396.00	
Minimum	9.00	22.00	0.44	0.60	59.00	
Average	46.26	113.91	3.95	9.25	199.96	
95 Percentile	83.60	184.50	15.11	23.01	351.80	
98 Percentile	140.56	219.72	15.85	23.02	376.64	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 20

**Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: N-E of Mine Working**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
22-04-2017	29	102	8.81	<6	205	Sunny
10-05-2017	31	61	1.71	<6	139	Sunny
25-05-2017	22	124	1.3	<6	195	Sunny
12-06-2017	20	78	3.7	<6	210	Sunny & Cloudy
22-06-2017	19	42	3.42	6	79	Cloudy & Rainfall
12-07-2017	14	36	2.11	<6	114	Cloudy & Night Rainfall
26-07-2017	38	90	3.16	<6	155	Cloudy & Night Heavy Rainfall
10-08-2017	47	51	3.08	<6	65	Night Rainfall
25-08-2017	41	86	18	7	188	Cloudy & Rainfall
11-09-2017	15	87	0.84	8	105	Cloudy & Evening Rainfall
25-09-2017	21	52	7.53	6	102	Sunny
09-10-2017	36	44	1.02	3.23	93	Sunny & Cloudy
27-10-2017	31	140	9.76	23.37	170	Sunny
09-11-2017	46	151	0.62	2.7	222	Sunny
27-11-2017	16	155	5.51	2.04	250	Sunny
08-12-2017	77	175	0.63	1.53	264	Cloudy
25-12-2017	117	178	3.74	7.85	295	Sunny
08-01-2018	66	266	2	12.54	575	Sunny
22-01-2018	79	238	28.22	<6	345	Sunny
05-02-2018	29	225	11.9	17.46	471	Sunny
20-02-2018	39	211	2.59	6.6	358	Sunny
08-03-2018	44	140	3.56	6.18	373	Sunny
23-03-2018	29	146	1.26	16.88	253	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	117.00	266.00	28.22	23.37	575.00	
Minimum	14.00	36.00	0.62	1.53	65.00	
Average	39.39	125.13	5.41	8.49	227.22	
95 Percentile	78.80	236.70	17.39	19.23	461.20	
98 Percentile	100.28	253.68	23.72	21.72	529.24	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 21

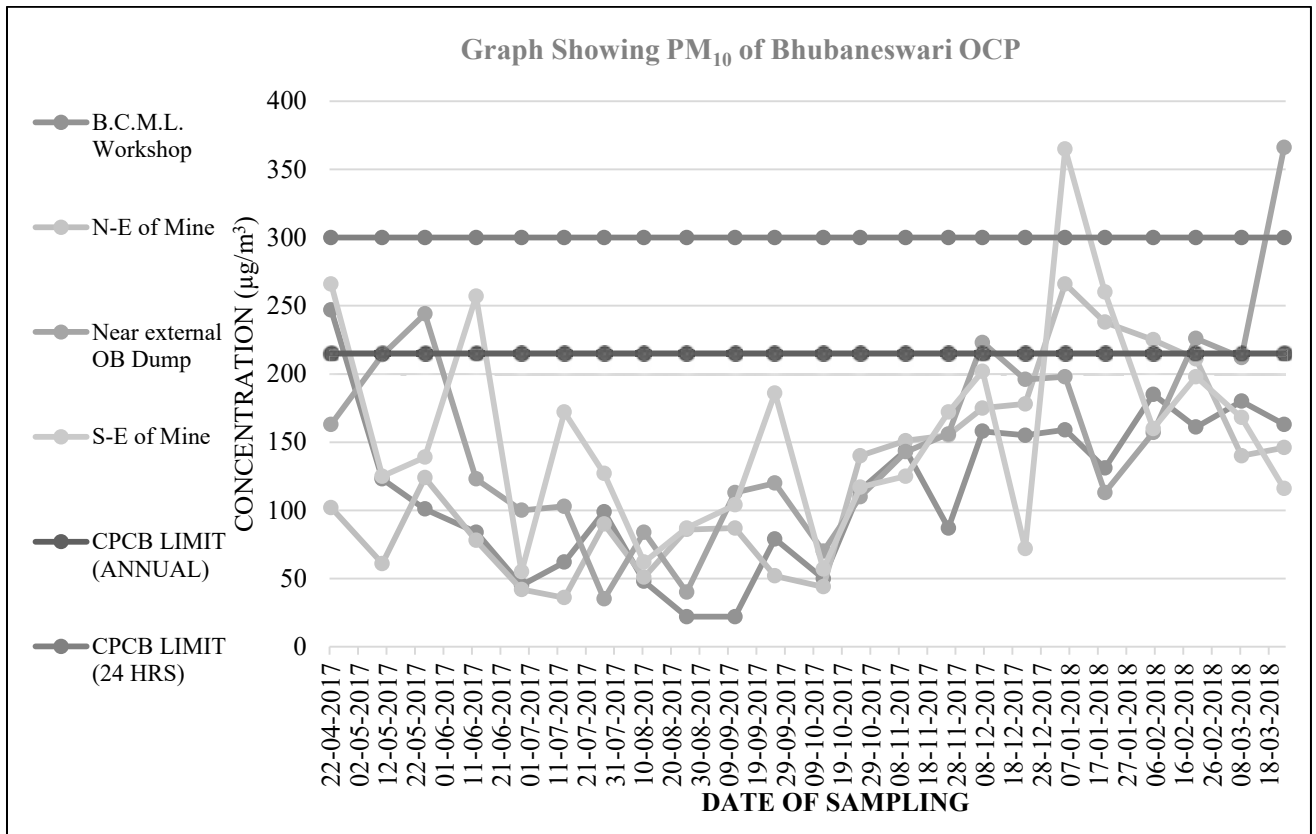
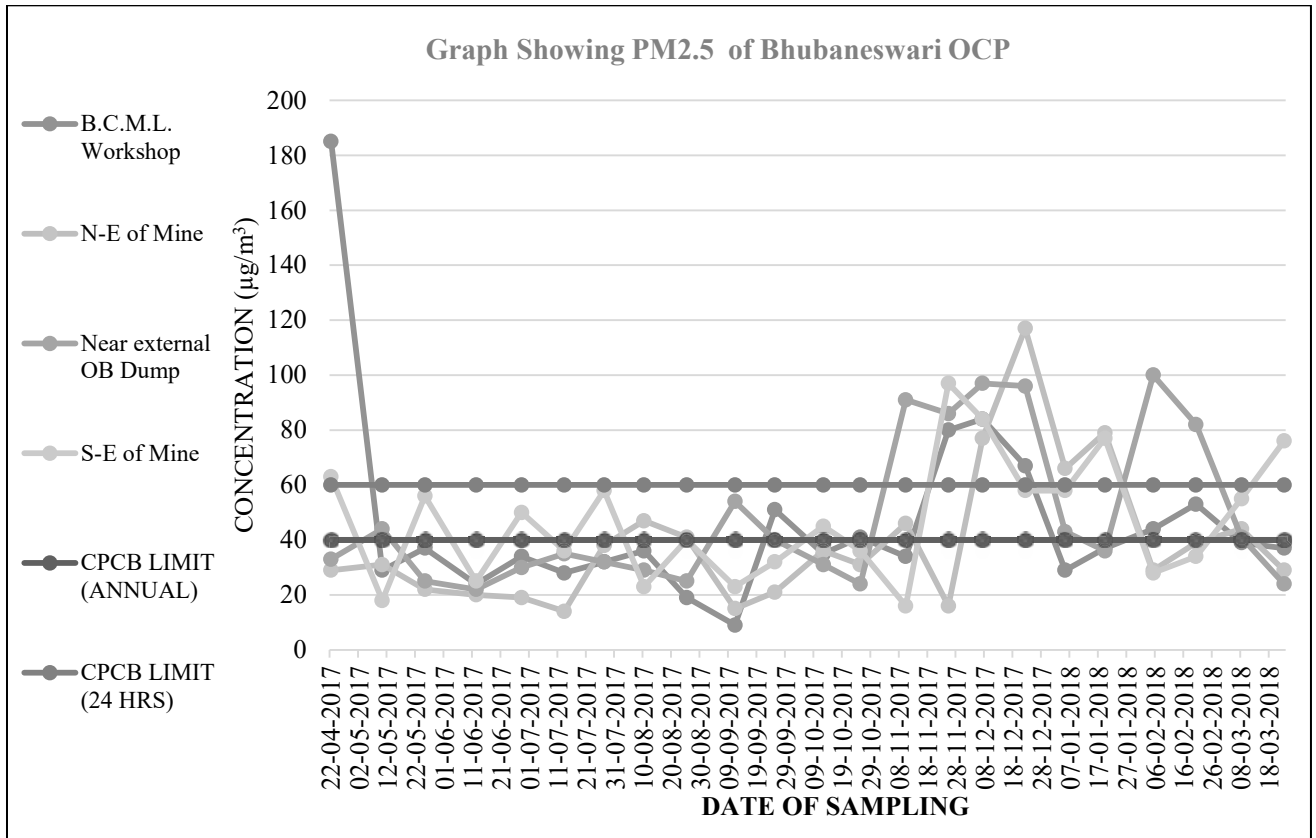
**Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Near External OB Dump**

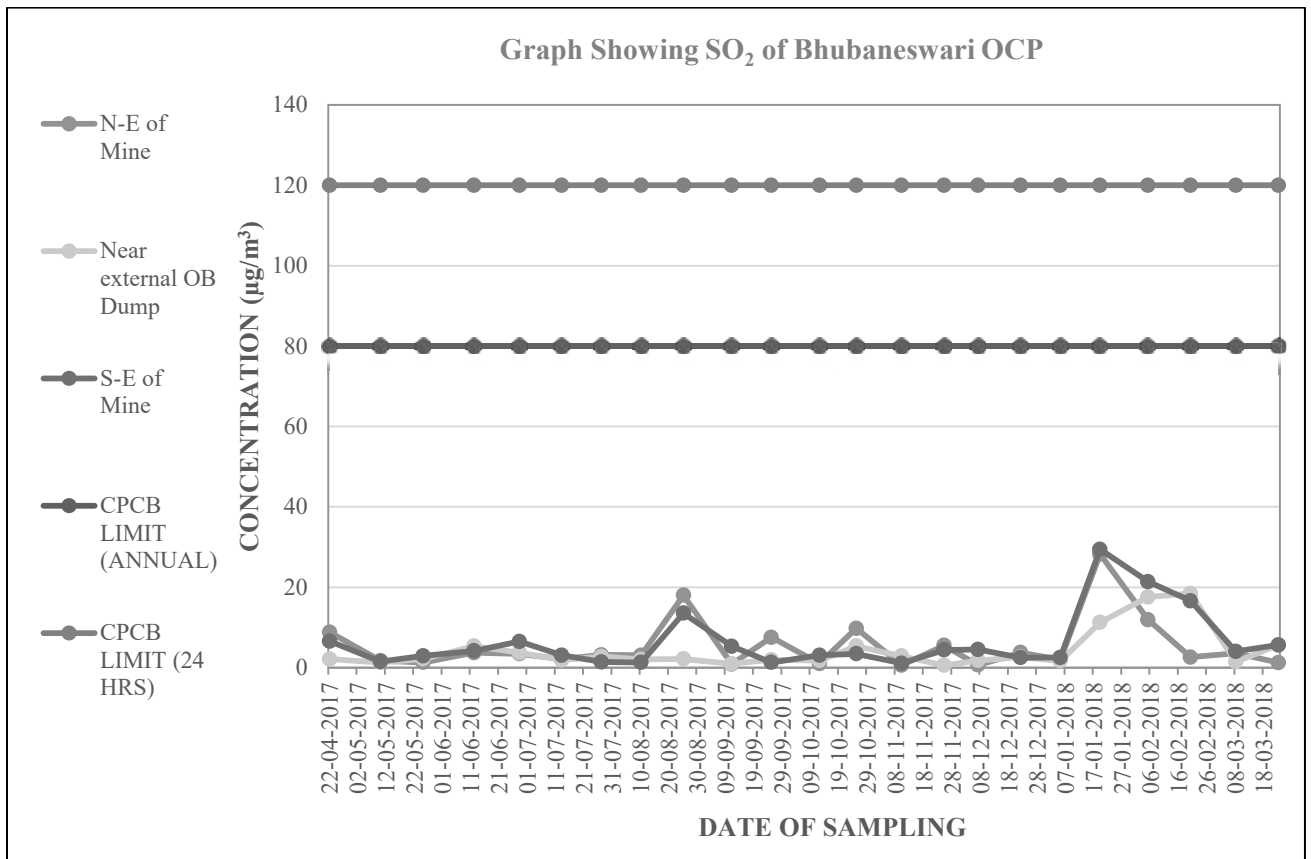
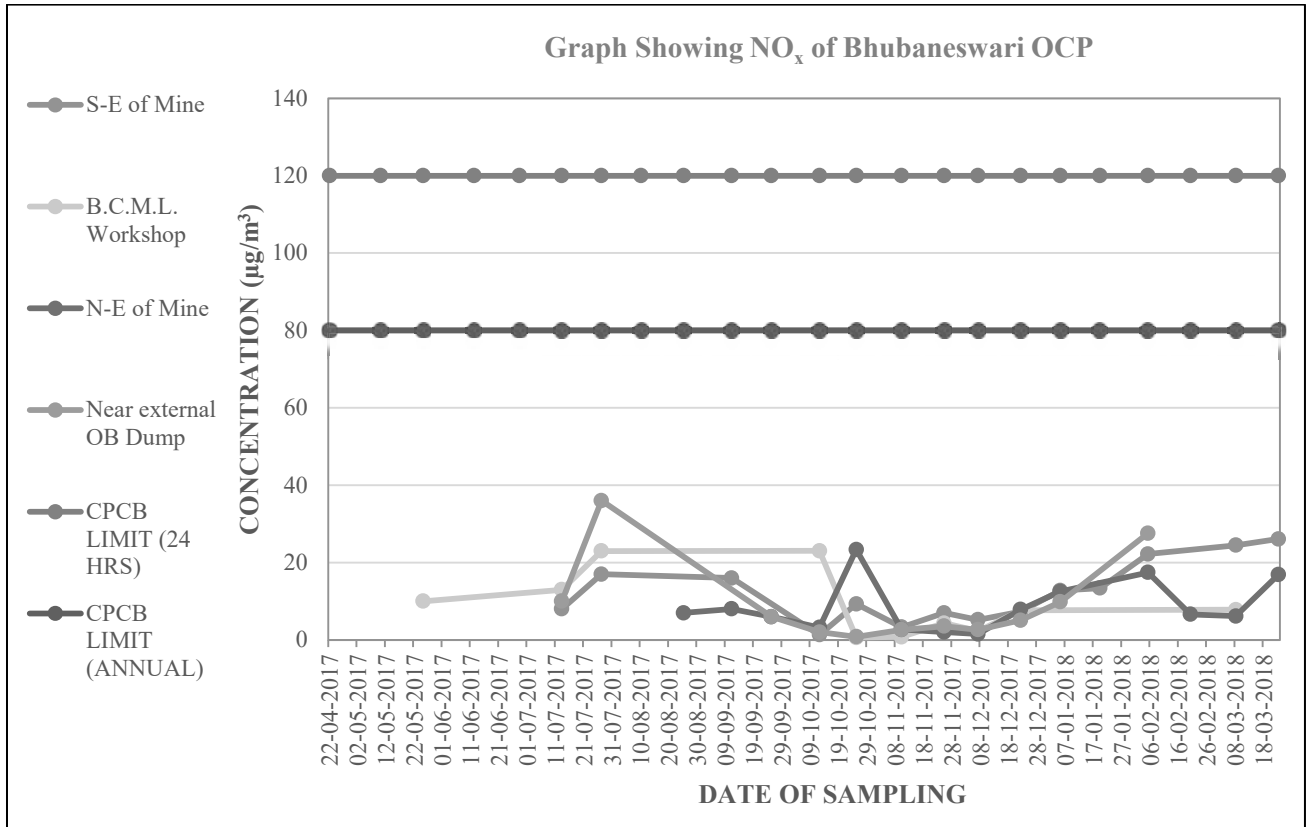
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
22/04/2017	33	163	2.11	<6	235	North to South, Sunny
10/05/2017	44	214	1.28	<6	624	East to West, sunny
25/05/2017	25	244	2.17	<6	460	South to North, Sunny
12/06/2017	22	123	5.36	<6	220	Northeast to Southwest, Sunny & Cloudy
22/06/2017	30	100	3.7	<6	182	East to West, Cloudy & Rainfall
12/07/2017	35	103	1.88	10	115	West to East, Evening Heavy Rainfall
26/07/2017	32	35	2.77	36	94	East to West , Cloudy & Night Heavy Rainfall
10/08/2017	29	84	2.05	<6	133	South to North, Night Rainfall
25/08/2017	25	40	2.14	<6	54	South to North, Cloudy & Rainfall
11/09/2017	54	113	0.94	<6	127	North to South , Cloudy & Evening Rainfall
25/09/2017	40	120	1.95	6	136	East to West , Sunny
12/10/2017	31	70	1.77	2.03	103	West to East, Cloudy & evening Rainfall
26/10/2017	24	110	5.36	0.82	310	North to South, Sunny
10/11/2017	91	143	2.88	2.66	221	South to North, sunny
25/11/2017	86	156	0.56	3.55	253	East to West , Sunny
07/12/2017	97	223	1.76	2.63	349	North to South, sunny
22/12/2017	96	196	2.65	5.07	477	North to South, Sunny
05/01/2018	43	198	1.67	9.86	279	North to South, sunny
19/01/2018	36	113	11.23	<6	162	North to South, Sunny
05/02/2018	100	157	17.56	27.59	280	South to North Sunny
20/02/2018	82	226	18.43	<6	493	North to South, Sunny
08/03/2018	41	212	1.44	<6	486	North to South, sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	100.00	244.00	18.43	36.00	624.00	
Minimum	22.00	35.00	0.56	0.82	54.00	
Average	49.82	142.86	4.17	9.66	263.32	
95 Percentile	96.95	225.85	17.24	31.80	492.65	
98 Percentile	98.74	236.44	18.06	34.32	568.98	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 22

**Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: S-E of Mine Working**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
22-04-2017	63	266	6.57	<6	573	Sunny
10-05-2017	18	125	1.49	<6	257	Sunny
25-05-2017	56	139	2.92	<6	355	Sunny
12-06-2017	25	257	4.13	<6	583	Sunny & Cloudy
28-06-2017	50	55	6.48	<6	76	Cloudy
13-07-2017	36	172	3.08	8	241	Cloudy & Night Rainfall
27-07-2017	58	127	1.4	17	244	Cloudy & Evening Rainfall
10-08-2017	23	62	1.29	<6	188	Night Rainfall
25-08-2017	40	87	13.55	<6	111	Cloudy & Rainfall
11-09-2017	23	104	5.32	16	156	Cloudy & Evening Rainfall
25-09-2017	32	186	1.28	<6	247	Sunny
12-10-2017	45	57	3.07	1.32	81	Cloudy & Evening Rainfall
26-10-2017	36	117	3.44	9.32	183	Sunny
09-11-2017	16	125	1.08	3.32	267	Sunny
27-11-2017	97	172	4.39	6.97	221	Sunny
08-12-2017	84	202	4.51	5.19	440	Cloudy
25-12-2017	58	72	2.49	7.33	230	Sunny
08-01-2018	58	365	2.5	12.79	747	Sunny
22-01-2018	77	260	29.43	13.4	463	Sunny
05-02-2018	28	160	21.4	22.21	325	Sunny
20-02-2018	34	198	16.61	<6	349	Sunny
08-03-2018	55	168	4.03	24.48	321	Sunny
23-03-2018	76	116	5.64	26.1	202	South to North, Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	97.00	365.00	29.43	26.10	747.00	
Minimum	16.00	55.00	1.08	1.32	76.00	
Average	47.30	156.17	6.35	12.39	298.26	
95 Percentile	83.30	265.40	20.92	25.05	582.00	
98 Percentile	91.28	321.44	25.90	25.68	674.84	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





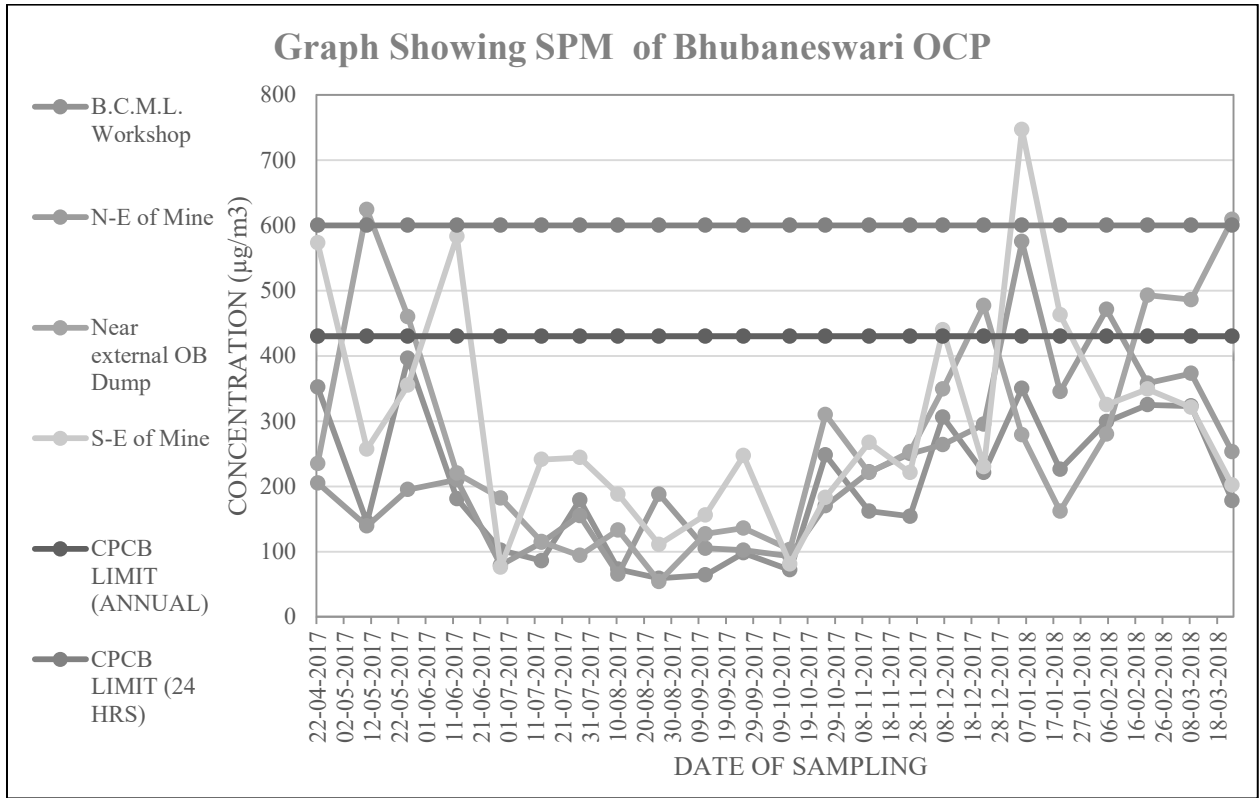


Table: 23

**Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Ananta Expansion Area (A1)**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14-04-2017	51	557	3.47	8	561	Sunny
25-04-2017	45	398	9.11	<6	580	Sunny
11-05-2017	31	341	2.25	<6	652	Sunny
26-05-2017	31	379	2.16	<6	499	Sunny & Afternoon Rainfall
13-06-2017	21	169	4.34	<6	431	Sunny
26-06-2017	18	89	9.74	8	162	Cloudy & Rainfall
13-07-2017	39	101	2.01	<6	153	Cloudy & Night Rainfall
27-07-2017	10	102	4.71	<6	311	Cloudy & Evening Rainfall
11-08-2017	27	242	2.87	<6	509	Sunny
29-08-2017	17	39	1.11	<6	159	Cloudy & Rainfall
12-09-2017	23	106	2.77	38	169	Cloudy & Night Rainfall
26-09-2017	35	202	1.46	<6	288	Sunny
12-10-2017	51	75	4.75	4.39	96	Cloudy & evening Rainfall
25-10-2017		402	0.62	4.5	566	Sunny & PM2.5 Sampler Breakdown
11-11-2017	26	324	3.32	7.07	644	Sunny
27-11-2017	112	354	5.78	37.17	469	Sunny
13-12-2017	103	170	1.23	2.91	390	Sunny
28-12-2017	66	291	4.25	3.85	539	Sunny
11-01-2018	90	436	0.37	8.97	875	Sunny
27-01-2018	196	488	46.74	56.77	1303	Sunny
10-02-2018	64	336	14.68	7.98	904	Sunny
25-02-2018	165	850	40.55	<6	1183	Sunny
14-03-2018	154	691	3.3	7.03	1009	Sunny
29-03-2018	70	72	1.71	<6	269	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	196.00	850.00	46.74	56.77	1303.00	
Minimum	10.00	39.00	0.37	2.91	96.00	
Average	62.83	300.58	7.22	14.97	530.04	
95 Percentile	163.90	670.90	36.67	45.51	1156.90	
98 Percentile	182.36	776.86	43.89	52.27	1247.80	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 24

**Project: Ananta OCP
Monitoring Station: Near Talcher West underground (A2)**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
13-04-2017	28	123	8.12	<6	307	Sunny
25-04-2017	57	393	16.71	<6	649	Sunny
11-05-2017	23	81	2.79	<6	166	Sunny
26-05-2017	15	208	1.62	7	379	Cloudy & Night Rainfal
13-06-2017	14	66	4.42	<6	154	Sunny
26-06-2017	31	46	5.04	<6	101	Cloudy & Rainfall
13-07-2017	34	49	1.52	<6	81	Cloudy & Night Rainfall
27-07-2017	8	33	2	10	90	Cloudy & Evening Rainfall
10-08-2017	49	176	1.13	<6	395	Sunny
29-08-2017	26	29	1.16	6	113	Cloudy & Rainfall
12-09-2017	18	36	0.8	<6	96	Cloudy & Night Rainfall
26-09-2017	17	39	0.95	<6	129	Sunny
12-10-2017	30	42	1.5	5.31	101	Cloudy & Evening Rainfall
25-10-2017	61	125	1.04	1.27	136	Sunny
11-11-2017	73	183	3.5	5.04	466	Sunny
27-11-2017	55	216	8.63	5.66	439	Sunny
13-12-2017	123	227	1.1	4.65	515	Sunny
28-12-2017	85	269	3.46	0.3	451	Sunny
11-01-2018	104	450	2.16	25.86	736	Sunny
27-01-2018	69	394	108.08	22.63	606	Sunny
10-02-2018	54	326	2.53	14.75	715	Sunny
25-02-2018	86	491	16.2	<6	636	Sunny
14-03-2018	56	854	0.94	10.14	895	Sunny
29-03-2018	151	187	1.49	7.97	369	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	151.00	854.00	108.08	25.86	895.00	
Minimum	8.00	29.00	0.80	0.30	81.00	
Average	52.79	210.13	8.20	9.04	363.54	
95 Percentile	120.15	484.85	16.63	23.76	732.85	
98 Percentile	138.12	687.02	66.05	25.02	821.86	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 25

**Project: Ananta OCP
Monitoring Station: Near Ananta OC Project Office (A3)**

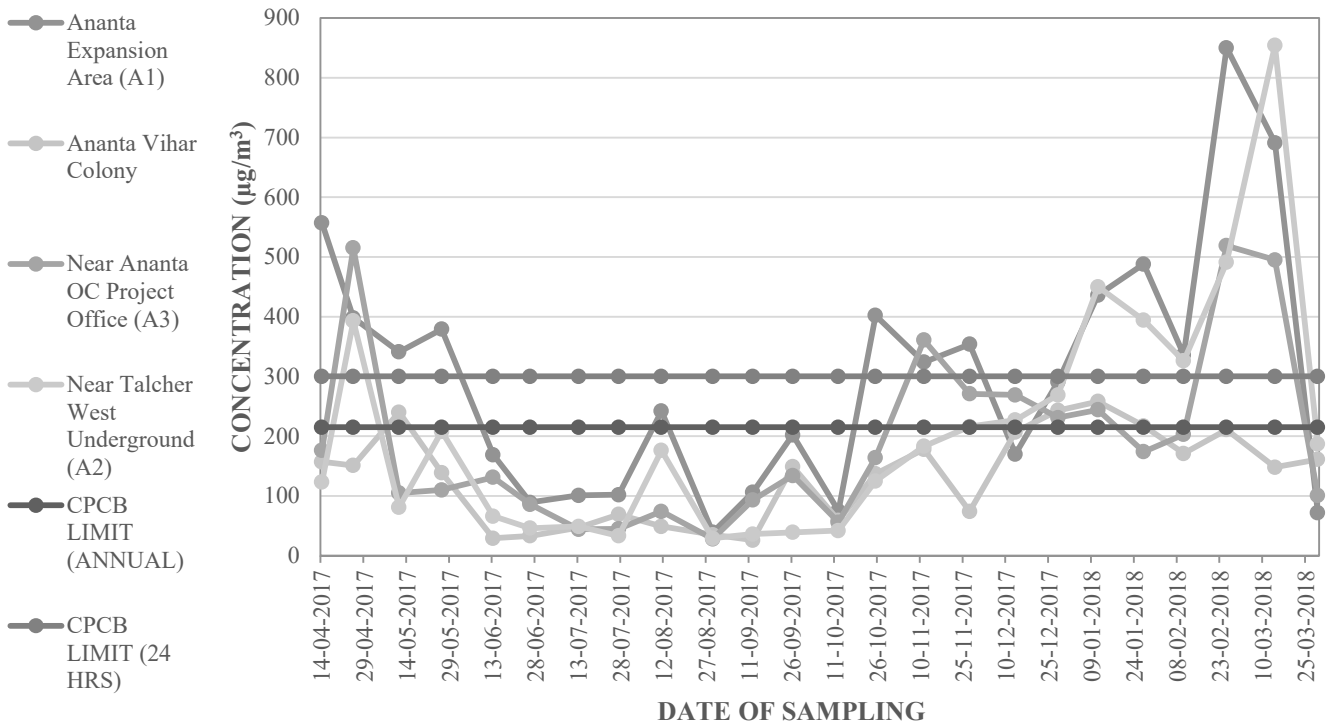
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
13-04-2017	33	176	2.89	8	271	Sunny
25-04-2017	16	515	3.52	<6	891	Sunny
11-05-2017	34	105	3.56	<6	227	Sunny
26-05-2017	30	110	2.51	8	288	Cloudy & Night Rainfall
13-06-2017	19	131	4.36	<6	230	Sunny
26-06-2017	30	86	4.94	<6	114	Cloudy & Rainfall
13-07-2017	36	44	1.07	<6	59	Cloudy & Night Rainfall
27-07-2017	19	45	1.54	<6	117	Cloudy & Evening Rainfall
11-08-2017	48	74	1.21	21	112	Sunny
28-08-2017	13	28	1.38	<6	42	Evening Heavy Rainfall
12-09-2017	50	93	1.2	<6	144	Cloudy & Night Rainfall
27-09-2017	51	134	1.77	<6	159	Sunny
12-10-2017	40	56	55.12	7.67	75	Cloudy & evening Rainfall
25-10-2017	37	164	8.85	4.02	237	Sunny
11-11-2017	119	361	1.55	45.84	522	Sunny
27-11-2017	90	271	1.07	6.03	483	Sunny
13-12-2017	56	269	0.8	1.77	446	Sunny
28-12-2017	88	231	0.2	1.72	448	Sunny
11-01-2018	88	244	1.42	44.42	419	Sunny
27-01-2018	53	174	17.12	6.2	323	Sunny
10-02-2018	46	203	1.12	9.63	324	Sunny
25-02-2018	79	519	24.58	37.34	559	Sunny
14-03-2018	126	495	1.38	69.96	613	Sunny
29-03-2018	41	101	5.37	<6	341	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	126.00	519.00	55.12	69.96	891.00	
Minimum	13.00	28.00	0.20	1.72	42.00	
Average	51.75	192.88	6.19	19.40	310.17	
95 Percentile	114.65	512.00	23.46	54.28	604.90	
98 Percentile	122.78	517.16	41.07	63.69	763.12	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 26

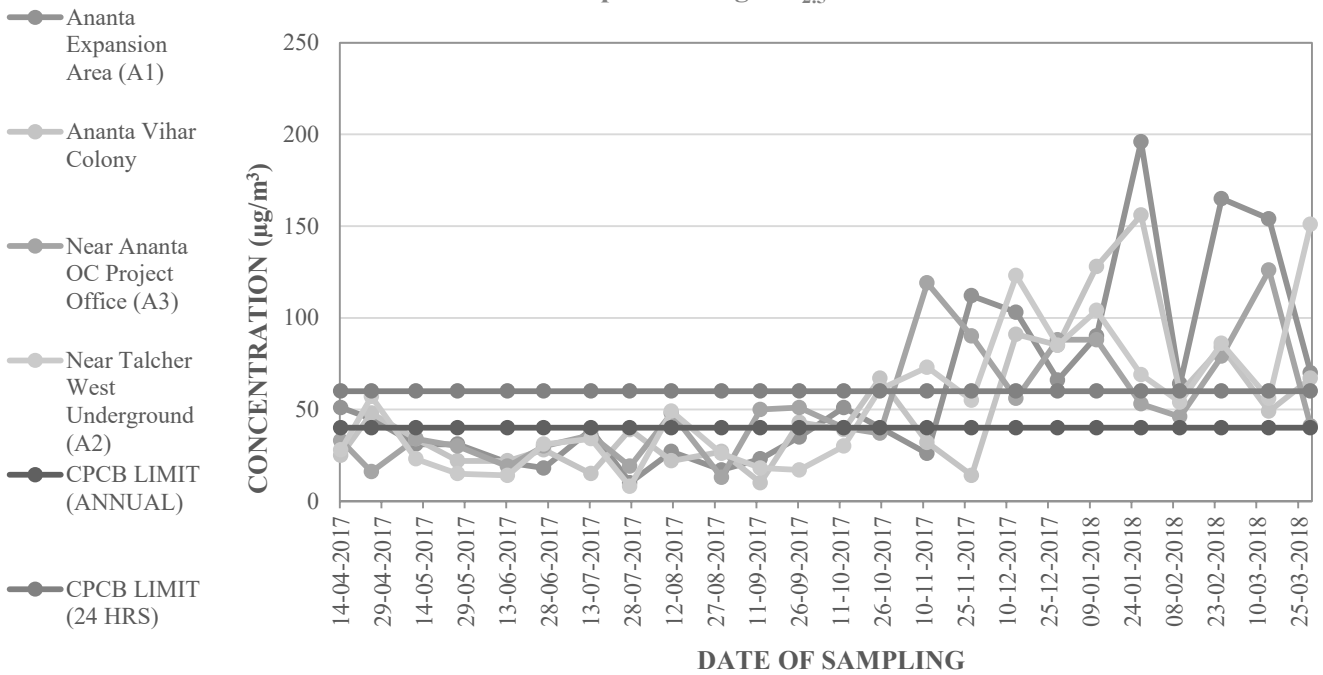
**Project: Ananta OCP
Monitoring Station: Ananta Vihar Colony**

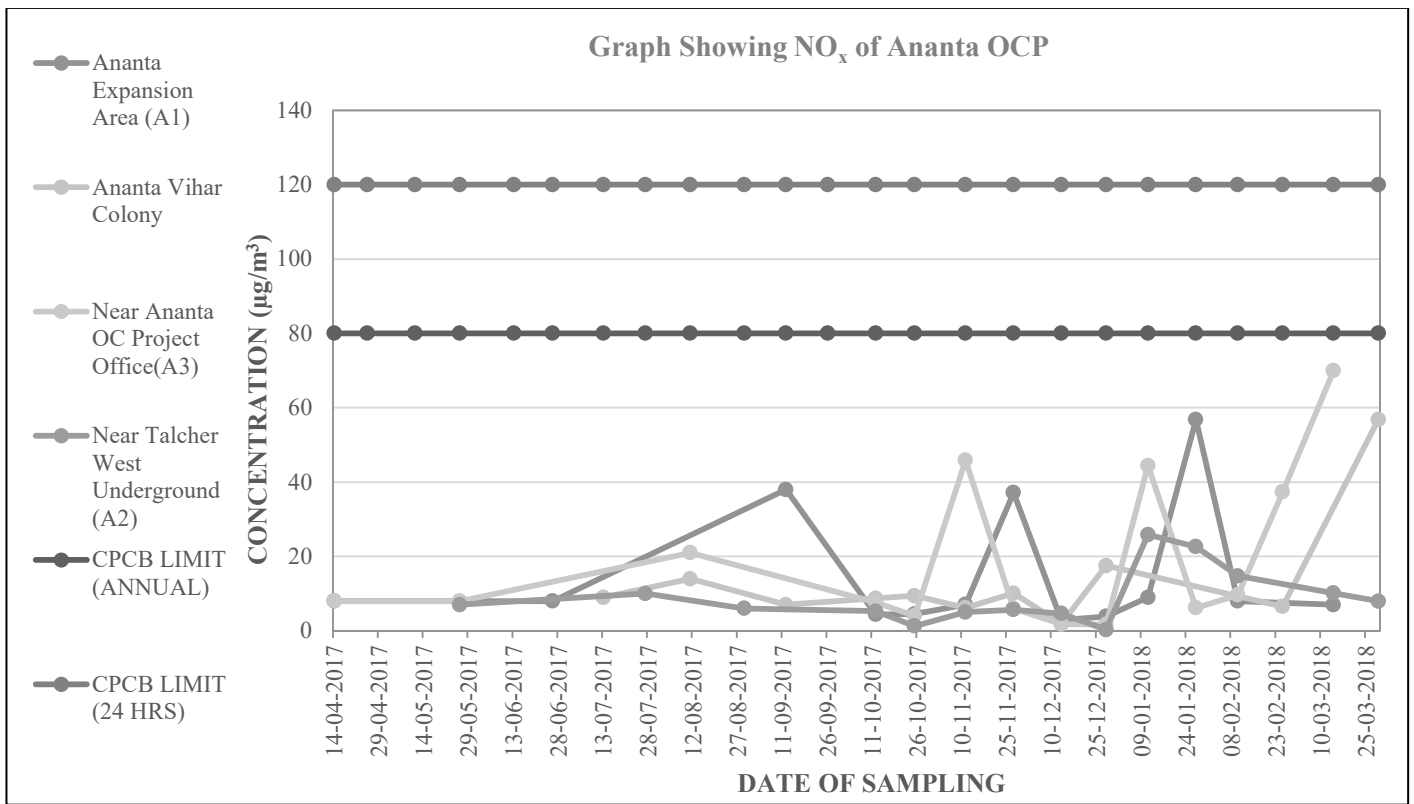
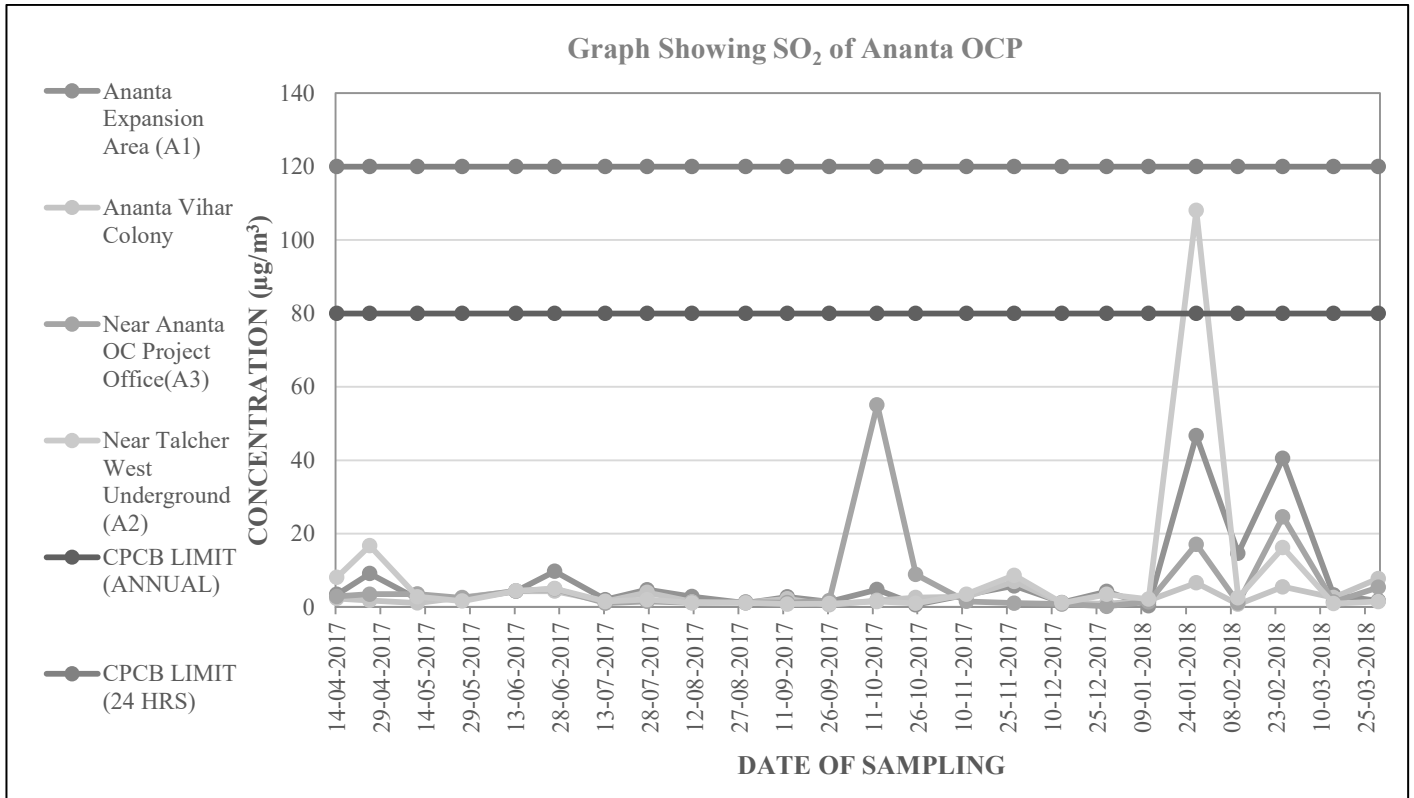
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14-04-2017	25	157	2.32	<6	212	Sunny
25-04-2017	48	151	1.79	<6	358	Sunny
11-05-2017	34	240	1.1	<6	385	Sunny
26-05-2017	22	139	2.63	<6	220	Cloudy & Night Rainfall
13-06-2017	22	29	4.34	<6	56	Sunny
26-06-2017	28	33	4.35	<6	71	Cloudy & Rainfall
13-07-2017	15	47	1.54	9	70	Cloudy & Night Rainfall
27-07-2017	39	69	3.99	<6	98	Cloudy & Evening Rainfall
10-08-2017	22	49	1.39	14	70	Sunny
28-08-2017	27	35	1.29	<6	79	Evening Heavy Rainfall
12-09-2017	10	26	2.26	7	41	Cloudy & Night Rainfall
26-09-2017	43	149	0.6	<6	169	Sunny
07-10-2017	39	59	1.79	8.75	82	Cloudy & Rainfall
23-10-2017	67	137	2.6	9.41	193	Sunny & Rainfall
04-11-2017	32	178	2.86	6.18	379	Sunny
18-11-2017	14	74	6.94	10.09	101	Cloudy
02-12-2017	91	207	1.11	1.9	303	Sunny
16-12-2017	85	243	0.95	17.5	491	Sunny
06-01-2018	128	258	1.78	<6	421	Sunny
20-01-2018	156	217	6.61	<6	372	Sunny
06-02-2018	59	171	0.76	<6	278	Sunny
21-02-2018	84	211	5.51	6.54	479	Sunny
09-03-2018	49	148	2.61	<6	292	Sunny
24-03-2018	67	161	7.78	56.83	261	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	156.00	258.00	7.78	56.83	491.00	
Minimum	10.00	26.00	0.60	1.90	41.00	
Average	50.25	132.83	2.87	13.38	228.38	
95 Percentile	122.45	242.55	6.89	37.17	470.30	
98 Percentile	143.12	251.10	7.39	48.96	485.48	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Graph Showing PM₁₀ of Ananta OCP



Graph Showing PM_{2.5} of Ananta OCP





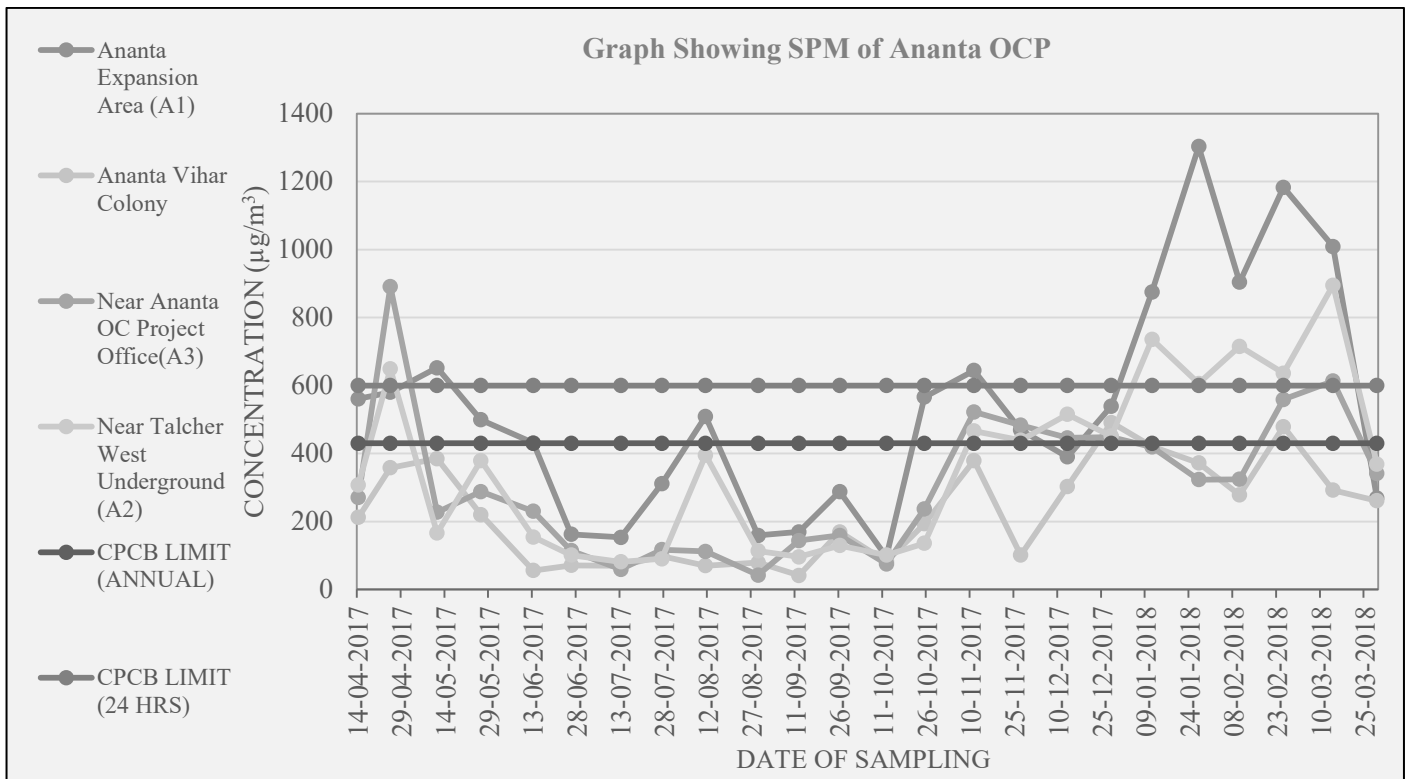


Table: 27

**Project: Bharatpur OCP
Monitoring Station: Near ETP**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
15-04-2017	22	270	7.22	<6	453	Sunny
21-04-2017	37	210	2.87	6	521	Sunny
10-05-2017	17	108	1.3	<6	233	Sunny
22-05-2017	16	38	2.51	49	82	Sunny & Afternoon, Rainfall
09-06-2017	11	32	6.23	<6	146	Sunny & Cloudy
21-06-2017	45	153	3.37	<6	369	Cloudy & Rainfall
07-07-2017	54	212	1.34	<6	333	Cloudy & Night Rainfall
21-07-2017	7	23	1.68	<6	43	Cloudy & Evening Rainfall
07-08-2017	16	45	1.72	<6	108	Evening Rainfall
22-08-2017	57	127	23.84	10	459	Sunny & Rainfall
11-09-2017	41	187	10.05	<6	274	Sunny
22-09-2017	19	89	0.48	<6	260	Cloudy
07-10-2017	44	51	2.47	3.4	69	Cloudy & Rainfall
23-10-2017	75	241	1.18	1.35	380	Sunny & Rainfall
03-11-2017	21	275	2.54	2.68	556	Sunny
20-11-2017	58	253	6.64	3.45	449	Sunny
06-12-2017	16	210	7.62	6.58	380	Sunny
21-12-2017	86	204	0.59	6.56	358	Sunny
05-01-2018	88	356	1.63	12.22	647	Sunny
19-01-2018	28	191	0.66	6.93	389	Sunny
06-02-2018	51	345	0.98	6.02	598	Sunny
21-02-2018	40	654	2.58	<6	1054	Sunny
09-03-2018	45	402	1.27	7.51	611	Sunny
24-03-2018	65	231	1.38	31.78	515	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	88.00	654.00	23.84	49.00	1054.00	
Minimum	7.00	23.00	0.48	1.35	43.00	
Average	39.96	204.46	3.84	10.96	386.96	
95 Percentile	84.35	395.10	9.69	37.81	641.60	
98 Percentile	87.08	538.08	17.50	44.52	866.78	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 28

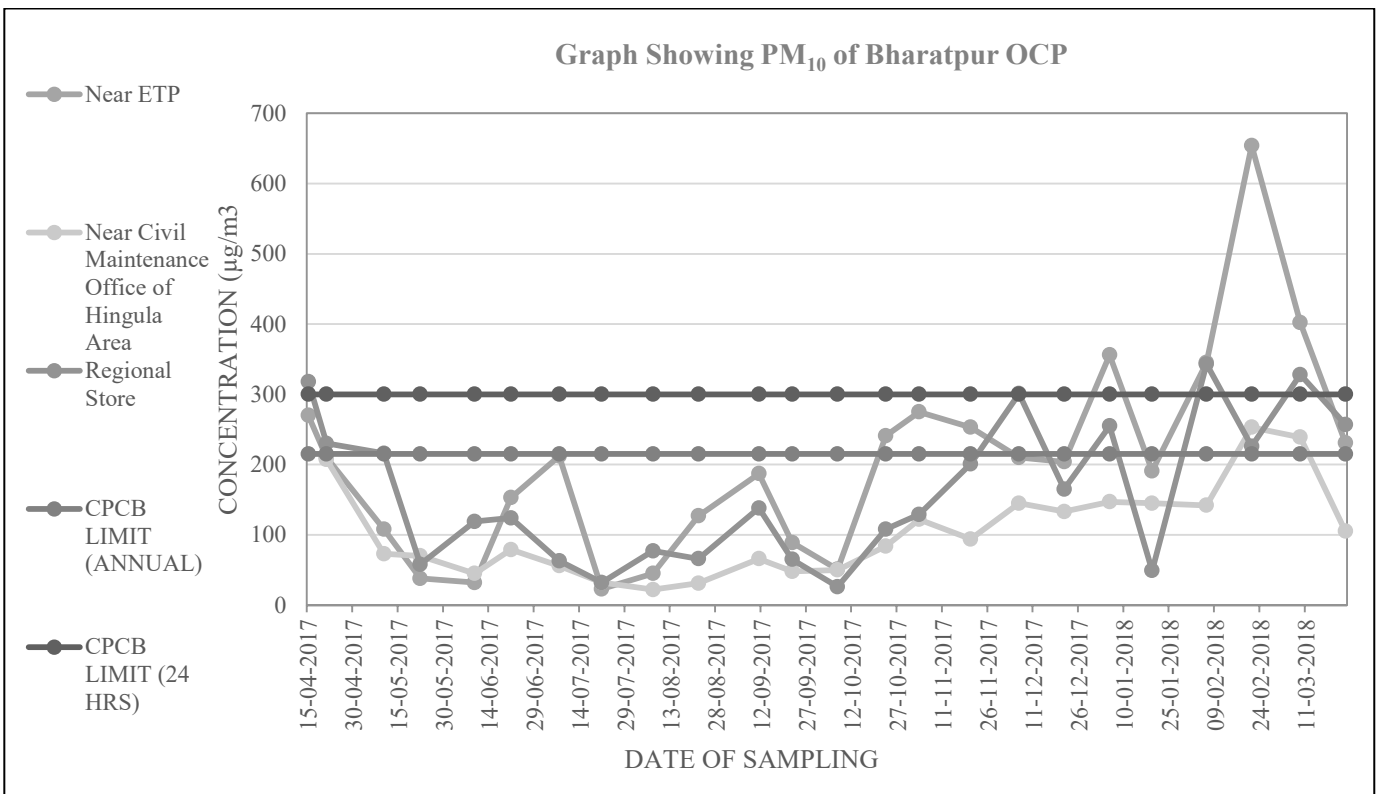
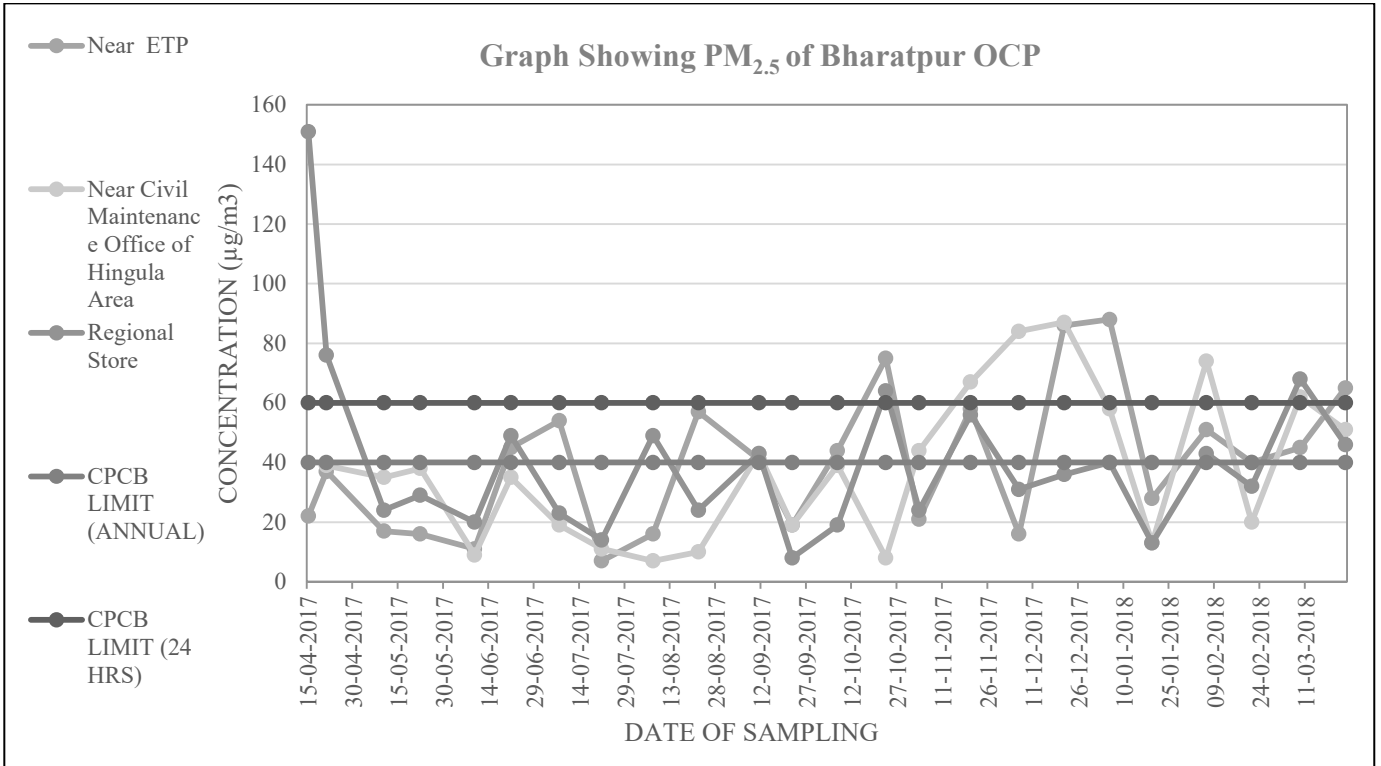
Project: Bharatpur OCP
Monitoring Station: Near Civil Maintenance Office of Hingula Area

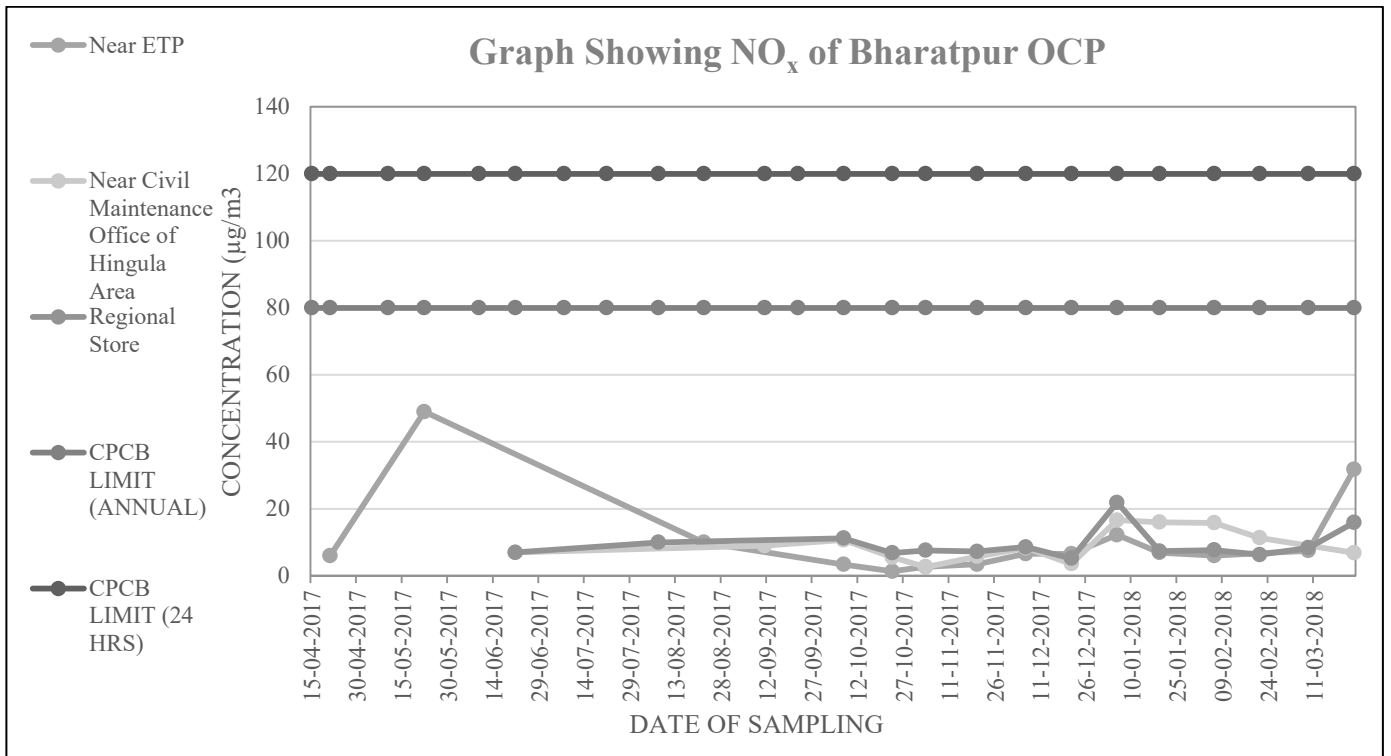
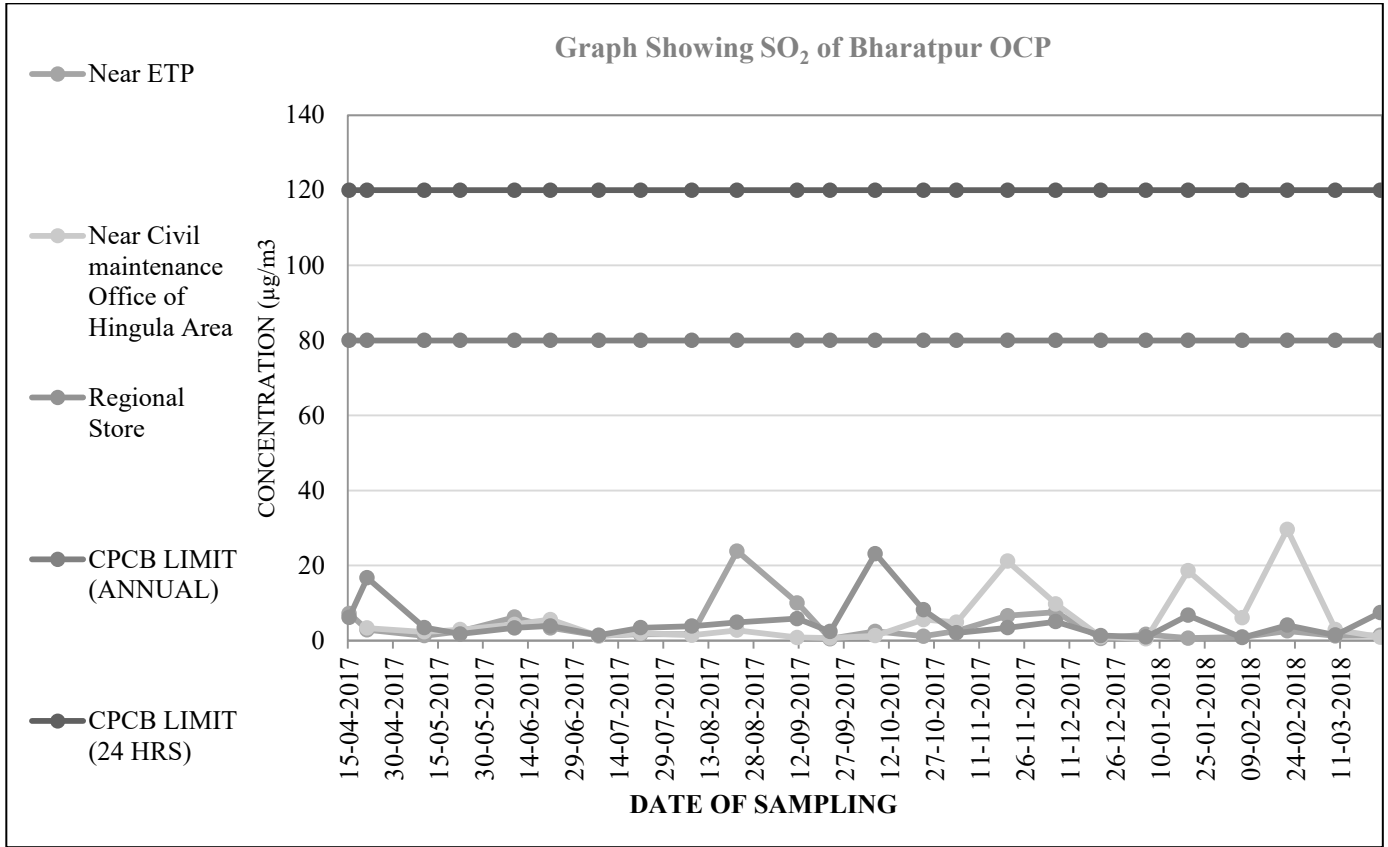
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
21-04-2017	39	207	3.34	<6	410	Sunny
04-05-2017	35	73	2.33	<6	233	Sunny
18-05-2017	38	70	2.91	<6	74	Sunny & Night Rainfall
09-06-2017	9	45	4.31	<6	101	Sunny & Cloudy
21-06-2017	35	79	5.59	7	129	Cloudy & Rainfall
07-07-2017	19	56	1.19	<6	151	Cloudy & Night Rainfall
21-07-2017	11	32	1.97	<6	60	Cloudy & Evening Rainfall
07-08-2017	7	22	1.43	<6	51	Evening Rainfall
21-08-2017	10	31	2.73	<6	61	Sunny & Rainfall
06-09-2017	43	66	0.83	9	154	Sunny
22-09-2017	19	48	0.71	<6	77	Cloudy
07-10-2017	39	50	1.28	10.69	68	Cloudy & Rainfall
23-10-2017	8	84	5.59	5.55	127	Sunny & Rainfall
09-11-2017	44	122	4.9	2.62	205	Sunny
27-11-2017	67	94	21.18	5.78	217	Sunny
07-12-2017	84	145	9.79	8.3	243	Sunny
22-12-2017	87	133	0.97	3.59	186	Sunny
05-01-2018	58	147	0.43	16.6	231	Sunny
19-01-2018	13	145	18.62	16.02	345	Sunny
06-02-2018	74	142	6.13	15.79	206	Sunny
21-02-2018	20	253	29.66	11.31	456	Sunny
09-03-2018	62	239	2.92	<6	395	Sunny
24-03-2018	51	105	0.9	6.86	348	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	87.00	253.00	29.66	16.60	456.00	
Minimum	7.00	22.00	0.43	2.62	51.00	
Average	37.91	103.83	5.64	9.16	196.87	
95 Percentile	83.00	235.80	20.92	16.25	408.50	
98 Percentile	85.68	246.84	25.93	16.46	435.76	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 29

**Project: Bharatpur OCP
Monitoring Station: Regional Store**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
15-04-2017	151	318	6.15	<6	456	Sunny
21-04-2017	76	230	16.73	<6	413	Sunny
06-05-2017	24	216	3.48	<6	456	Sunny
22-05-2017	29	58	1.77	<6	115	Sunny & night Rainfall
09-06-2017	20	119	3.4	<6	313	Sunny & Cloudy
21-06-2017	49	124	3.88	7	238	Cloudy & Rainfall
07-07-2017	23	63	1.43	<6	157	Cloudy & Night Rainfall
21-07-2017	14	32	3.42	<6	51	Cloudy & Evening Rainfall
07-08-2017	49	77	3.86	10	236	Evening Rainfall
22-08-2017	24	66	4.87	<6	140	Sunny & Rainfall
06-09-2017	43	138	5.84	<6	257	Sunny
22-09-2017	8	65	2.39	<6	184	Cloudy
06-10-2017	19	26	23.18	11.21	71	Cloudy
21-10-2017	64	108	8.22	6.82	175	Sunny & Cloudy
06-11-2017	24	129	2.06	7.59	343	Sunny
21-11-2017	56	201	3.45	7.27	444	Sunny
07-12-2017	31	301	5.04	8.58	517	Sunny
22-12-2017	36	165	1.36	5.23	286	Sunny
05-01-2018	40	255	0.96	21.88	384	Sunny
19-01-2018	13	49	6.75	7.36	134	Sunny
07-02-2018	43	343	0.8	7.69	676	Sunny
22-02-2018	32	226	4.11	6.3	516	Sunny
10-03-2018	68	328	1.47	8.36	540	Sunny
26-03-2018	46	257	7.49	15.91	480	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in μg/m³
Maximum	151.00	343.00	23.18	21.88	676.00	
Minimum	8.00	26.00	0.80	5.23	51.00	
Average	40.92	162.25	5.09	9.37	315.92	
95 Percentile	74.80	326.50	15.45	18.00	536.55	
98 Percentile	116.50	336.10	20.21	20.33	613.44	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





Graph Showing SPM of Bharatpur OCP

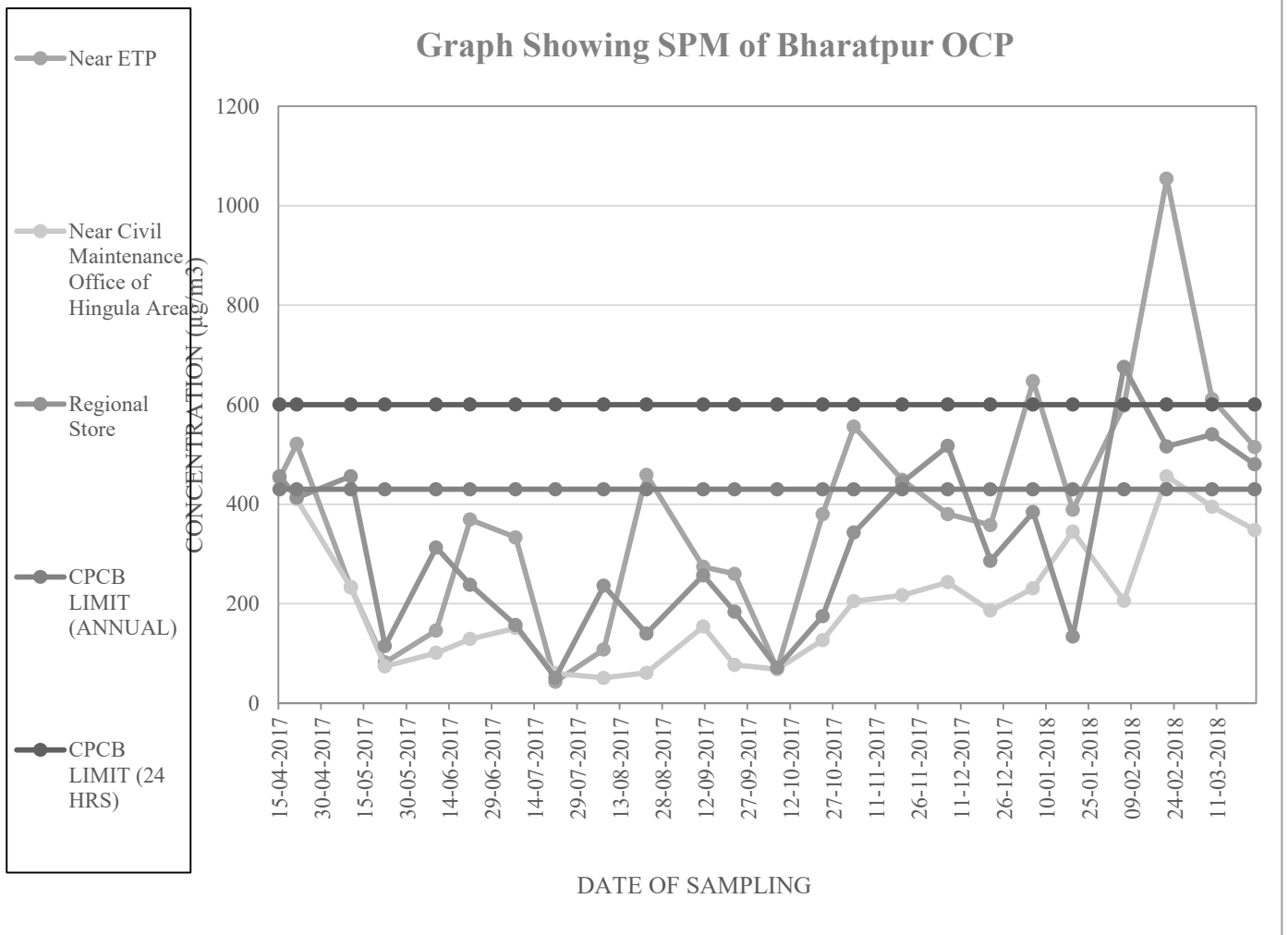
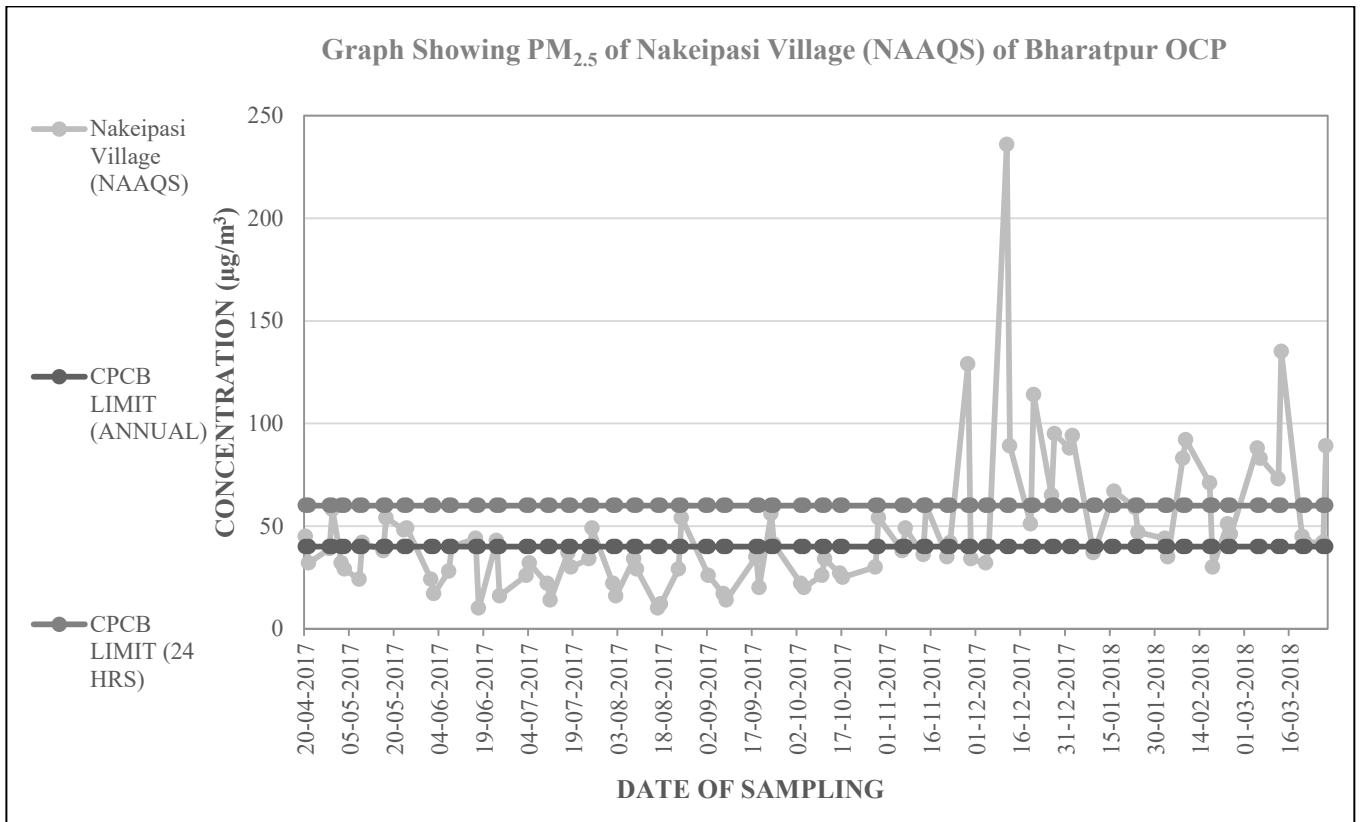


Table: 30
Project: Bharatpur OCP
Monitoring Station: Nakeipasi (NAAQS)

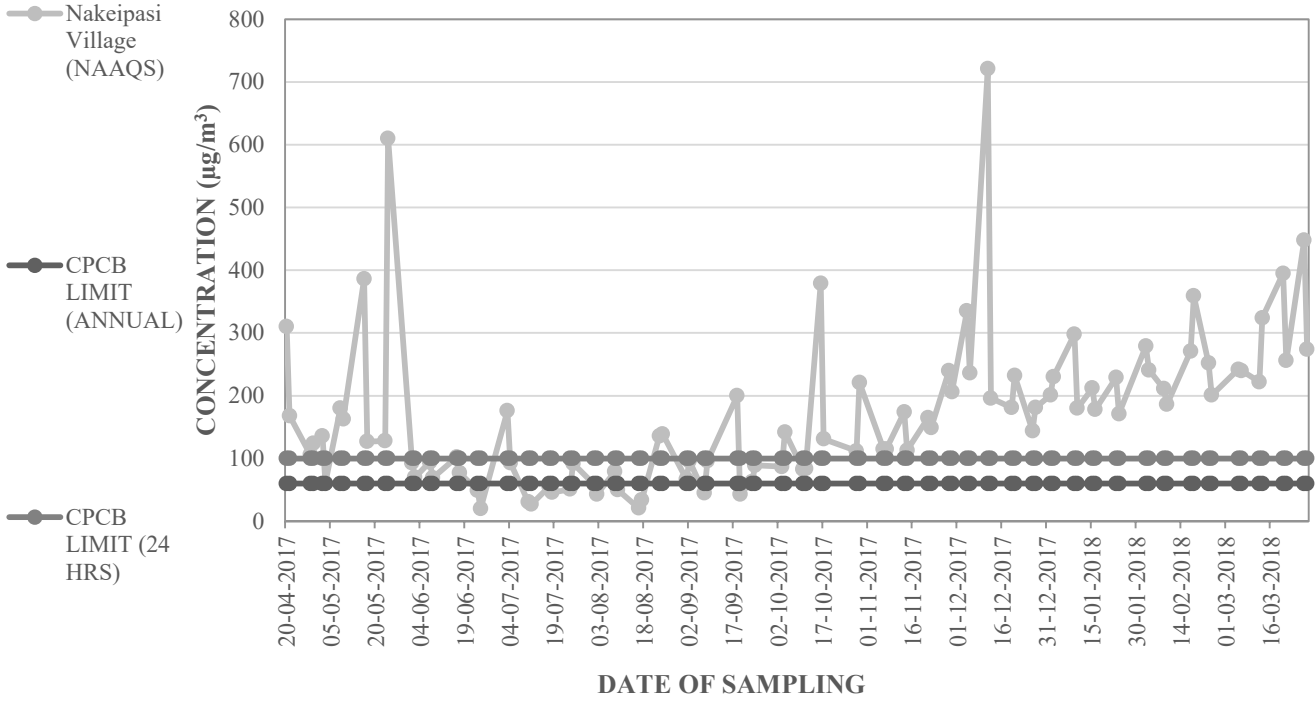
Date of Sampling	PM2.5	PM10	SO2	NOx	SPM	Remarks
20/04/2017	45	310	1.92	<6	494	Sunny
21/04/2017	32	168	12.16	<6	324	Sunny
28/04/2017	39	106	2.99	<6	288	Sunny
29/04/2017	58	124	4.92	<6	320	Sunny
02/05/2017	32	136	2.46	<6	247	Sunny
03/05/2017	29	61	1.13	<6	133	Evening Rainfall
08/05/2017	24	180	2.25	<6	356	Sunny
09/05/2017	42	163	1.53	<6	514	Evening Rainfall
16/05/2017	38	386	3.37	<6	482	Sunny
17/05/2017	54	127	2.94	8	518	Sunny
23/05/2017	48	128	2.16	<6	292	Sunny
24/05/2017	49	610	3.48	<6	685	Sunny
01/06/2017	24	93	3.92	<6	133	Sunny & Evening rainfall
02/06/2017	17	70	3.61	<6	97	Sunny & Night rainfall
07/06/2017	28	94	3.66	<6	294	Sunny & Cloudy
08/06/2017	40	69	5.89	<6	205	Sunny
16/06/2017	44	102	5.03	<6	118	Heavy Rainfall
17/06/2017	10	77	4.33	<6	104	Sunny
23/06/2017	43	49	3.94	<6	122	Cloudy & Rainfall
24/06/2017	16	20	3.99	<6	47	Cloudy & Rainfall
01/08/2017	22	59	3.43	9	127	Cloudy & Night Rainfall
02/08/2017	16	43	2.31	<6	72	Evening Rainfall
08/08/2017	34	79	3.17	10	100	Sunny & Rainfall
09/08/2017	29	50	2.28	<6	70	Cloudy & Night Rainfall
16/08/2017	10	21	2.02	<6	66	Cloudy & Rainfall
17/08/2017	12	34	1.13	<6	51	Night Rainfall
23/08/2017	29	136	1.08	<6	268	Evening Rainfall
24/08/2017	54	139	2	<6	152	Afternoon Rainfall
01/09/2017		67	9.03	<6	93	Cloudy & Evening Rainfall, PM 2.5 M/C breakdwn
02/09/2017	26	96	1.39	<6	97	Cloudy & Night Rainfall
07/09/2017	17	45	0.59	7	72	Cloudy & Evening Rainfall
08/09/2017	14	96	8.63	<6	134	Sunny & Night Rainfall
18/09/2017	35	200	0.92	28	217	Cloudy & Evening Rainfall
19/09/2017	20	43	0.85	29	81	Cloudy & Night Rainfall
23/09/2017	56	63	0.34	<6	102	Sunny & Cloudy Rainfall
24/09/2017	41	89	0.89	7	115	Sunny & Clody
03/10/2017	22	87	6.7	1.98	109	Cloudy
04/10/2017	20	142	20.47	6.08	277	Cloudy

Date of Sampling	PM2.5	PM10	SO2	NOx	SPM	Remarks
10/10/2017	26	83	1.15	5.58	183	Sunny & Cloudy
11/10/2017	34	84	1.23	2.35	145	Cloudy & Rainfall
16/10/2017	27	379	1.99	0.92	445	Sunny
17/10/2017	25	131	4.97	1.08	243	Sunny
28/10/2017	30	112	15.48	0.89	162	Sunny
03/07/2017	26	176	1.26	<6		Cloudy
04/07/2017	32	93	1.74	<6		Cloudy
10/07/2017	22	31	1.66	<6		Evening Heavy Rainfall
11/07/2017	14	27	1.92	<6		Cloudy & Rainfall
17/07/2017	37	55	2.95	<6		Cloudy & Night Rainfall
18/07/2017	30	46	4.81	<6		Cloudy & Evening Rainfall
24/07/2017	34	51	1.45	<6		Cloudy & Night Rainfall
25/07/2017	49	92	2.18	28		Cloudy & Rainfall
06/11/2017	38	115	10.47	18.33	196	Sunny
07/11/2017	49	115	1.22	3.45	214	Sunny
13/11/2017	36	174	0.68	4.99	389	Sunny
14/11/2017	60	113	1.05	2.42	226	Mostly Cloudy
21/11/2017	35	165	7.56	3.77	264	Sunny
22/11/2017	42	149	8.92	4.08	301	Sunny
28/11/2017	129	240	3.95	3.58	377	Sunny & Cloudy
29/11/2017	34	206	2.46	3.66	460	Sunny & Cloudy
04/12/2017	32	335	1.91	6.69	494	Sunny
05/12/2017	40	236	1.44	1.47	371	Sunny
11/12/2017	236	721	3.71	5.44	771	Sunny
12/12/2017	89	196	1.5	3.01	249	Sunny
19/12/2017	51	181	2.87	13.44	334	Sunny
20/12/2017	114	232	1.83	8.73	398	Sunny
26/12/2017	65	144	11.06	14.65	256	Sunny
27/12/2017	95	181	3.23	4.88	284	Sunny
01/01/2018	88	201	0.85	<6	277	Sunny
02/01/2018	94	230	0.77	<6	344	Sunny
09/01/2018	37	298	0.97	19.02	555	Sunny
10/01/2018	40	180	0.86	7.24	358	Sunny
15/01/2018		212	14.49	7.94	341	Sunny & PM2.5 Sampler Breakdown
16/01/2018	67	178	31.68	21.77	373	Sunny
23/01/2018	59	229	6.4	9.37	507	Sunny
24/01/2018	47	171	65.05	15.96	500	Sunny
02/02/2018	44	279	28.27	38.61	626	Sunny
03/02/2018	35	241	10.92	11.78	351	Sunny
08/02/2018	83	211	4.93	14.79	475	Sunny
09/02/2018	92	186	1.64	6.53	355	Sunny
17/02/2018	71	271	4.84	26.82	510	Sunny
18/02/2018	30	359	27.99	<6	445	Sunny

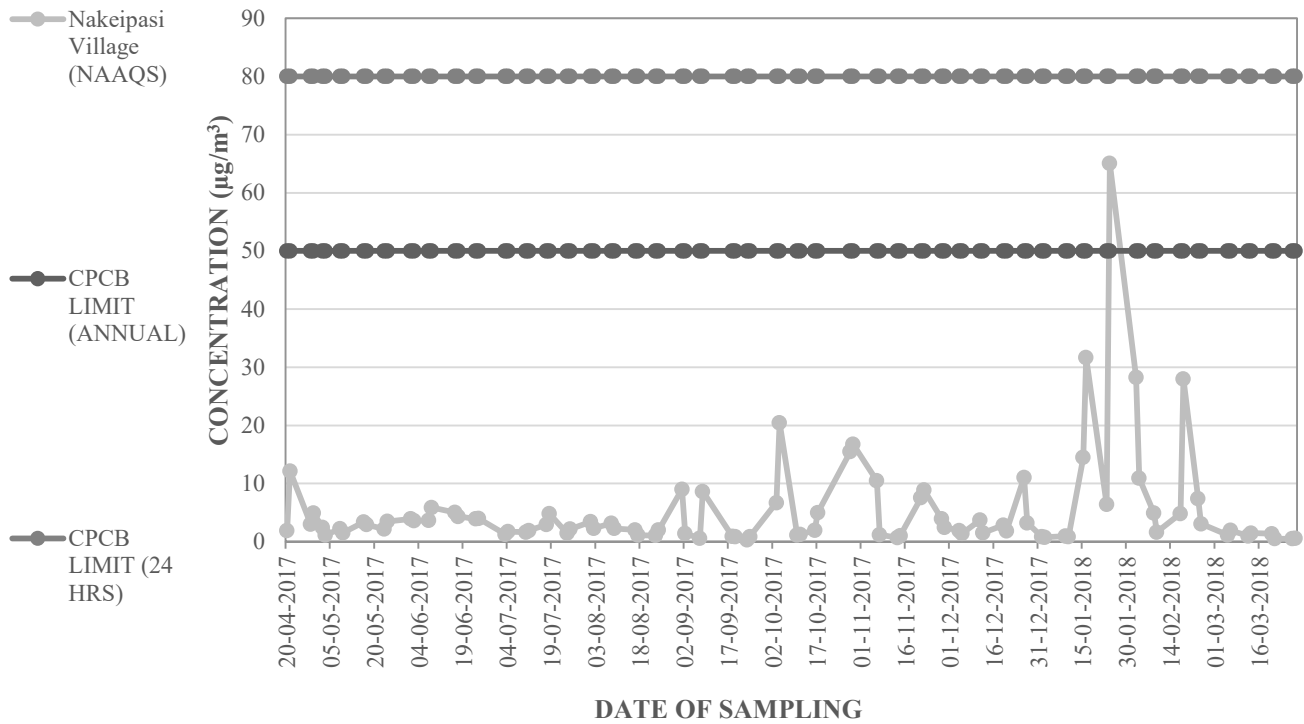
Date of Sampling	PM2.5	PM10	SO2	NOx	SPM	Remarks
23/02/2018	51	252	7.43	<6	450	Sunny
24/02/2018	46	201	3.07	7.55	387	Sunny
05/03/2018	88	242	1.14	<6	371	Sunny
06/03/2018	83	240	1.95	11.28	463	Sunny
12/03/2018	73	222	1	<6	382	Sunny
13/03/2018	135	324	1.48	<6	627	Sunny
20/03/2018	45	395	1.36	8.05	716	Sunny
21/03/2018	42	256	0.51	<6	397	Sunny
27/03/2018	42	448	0.51	<6	745	Sunny
28/03/2018	89	274	0.6	6.48	606	Sunny
29/10/2017	54	221	16.75	1.5	368	Sunny
Brief Statistics	PM2.5	PM10	SO2	NOx	SPM	All values in $\mu\text{g}/\text{m}^3$
Maximum	236	721	65.05	38.61	771	
Minimum	10	20	0.34	0.89	47	
Average	47.056	171.2	5.272	9.8332	312.7	
95 Percentile	94.55	382.2	18.424	28	626.9	
98 Percentile	130.32	477.2	28.884	29.769	725.9	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	



Graph Showing PM₁₀ of Nakeipasi Village (NAAQS) of Bharatpur OCP



Graph Showing SO₂ of Nakeipasi Village (NAAQS) of Bharatpur OCP



Graph Showing NO_x of Nakeipasi Village (NAAQS) of Bharatpur OCP

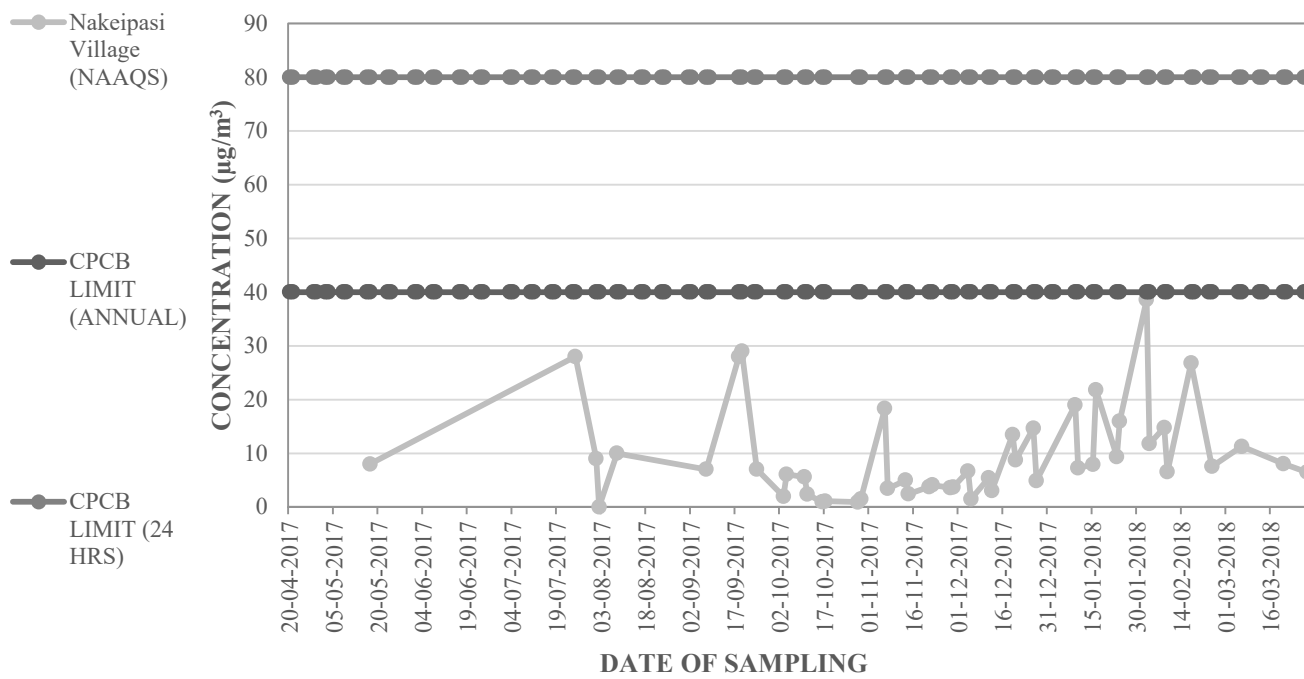


Table: 31

**Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Lingraj CGM Office**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
21/04/2017	37	230	2.91	<6	494	Sunny
11/05/2017	40	118	1.73	<6	203	Sunny
26/05/2017	28	134	3.38	<6	424	Cloudy & Night Rainfal
09/06/2017	23	94	4.72	<6	224	Sunny
21/06/2017	30	62	5.06	<6	133	Cloudy & Rainfall
07/07/2017	50	81	1.47	6	101	Cloudy & Night Rainfall
21/07/2017	39	109	1.79	<6	195	Cloudy & Evening Rainfall
04/08/2017	29	59	4.1	7	90	Sunny & Rainfall
21/08/2017	35	44	1.39	<6	59	Sunny & Rainfall
05/09/2017	57	101	1.31	<6	148	Sunny
21/09/2017	24	64	0.42	<6	158	Cloudy
05/10/2017	10	38	1.34	3.96	112	Cloudy
21/10/2017	11	26	3.43	4.06	45	Sunny & Cloudy
04/11/2017	138	322	2.49	1.62	508	Sunny
18/11/2017	23	36	2.84	2.52	86	Cloudy
02/12/2017	45	371	0.8	4.77	675	Sunny
16/12/2017	91	344	18.45	18.06	656	Sunny
06/01/2018	73	281	0.7	<6	558	Sunny
20/01/2018	176	290	7.92	<6	473	Sunny
05/02/2018	104	323	23.9	25.85	688	Sunny
20/02/2018	68	457	10.48	<6	662	Sunny
08/03/2018	85	277	1.4	<6	550	Sunny
23/03/2018	51	467	22.46	47.95	873	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	176.00	467.00	23.90	47.95	873.00	
Minimum	10.00	26.00	0.42	1.62	45.00	
Average	55.09	188.17	5.41	12.18	352.83	
95 Percentile	134.60	448.40	22.06	38.01	686.70	
98 Percentile	159.28	462.60	23.27	43.97	791.60	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 32

Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Near C.T.Road

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
15/04/2017	63	82	6.92	<6	185	Sunny
20/04/2017	33	189	4.32	<6	353	Sunny
10/05/2017	53	57	2.35	<6	113	Sunny
22/05/2017	13	373	2.75	<6	466	Sunny & Afternoon Rainfall
05/06/2017	33	109	5.28	<6	128	Sunny
19/06/2017	35	226	4.19	<6	276	Sunny & Night Rainfall
05/07/2017	24	183	2.28	7	276	Cloudy & Rainfall
19/07/2017	17	32	1.61	<6	52	Cloudy & Night Rainfall
03/08/2017	46	104	1.18	96	220	Cloudy & Rainfall
18/08/2017	14	19	1.11	<6	138	Evening Heavy Rainfall
04/09/2017	27	96	20.28	6	171	Sunny & Cloudy
20/09/2017	29	47	1.5	<6	75	Cloudy & Night Rainfall
10/10/2017	19	61	1.13	1.03	171	Sunny & Cloudy
21/10/2017	28	33	13.13	0.96	67	Heavy Rainfall
04/11/2017	16	185	1.32	4.87	328	Sunny
18/11/2017	35	54	1.06	11.22	107	Cloudy
02/12/2017	122	224	0.37	17.19	584	Sunny
16/12/2017	118	423	5.08	12.5	731	Sunny
06/01/2018	179	345	1.9	48.01	521	Sunny
20/01/2018	84	263	54.7	11.68	563	Sunny
06/02/2018	110	440	2.07	<6	710	Sunny
22/02/2018	81	267	2.58	<6	446	Sunny
09/03/2018	38	271	0.59	<6	435	Sunny
24/03/2018	53	154	1.32	27.85	316	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	179.00	440.00	54.70	96.00	731.00	
Minimum	13.00	19.00	0.37	0.96	52.00	
Average	52.92	176.54	5.79	20.36	309.67	
95 Percentile	121.40	415.50	19.21	69.61	691.10	
98 Percentile	152.78	432.18	38.87	85.44	721.34	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 33

Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Near North Side of Mine

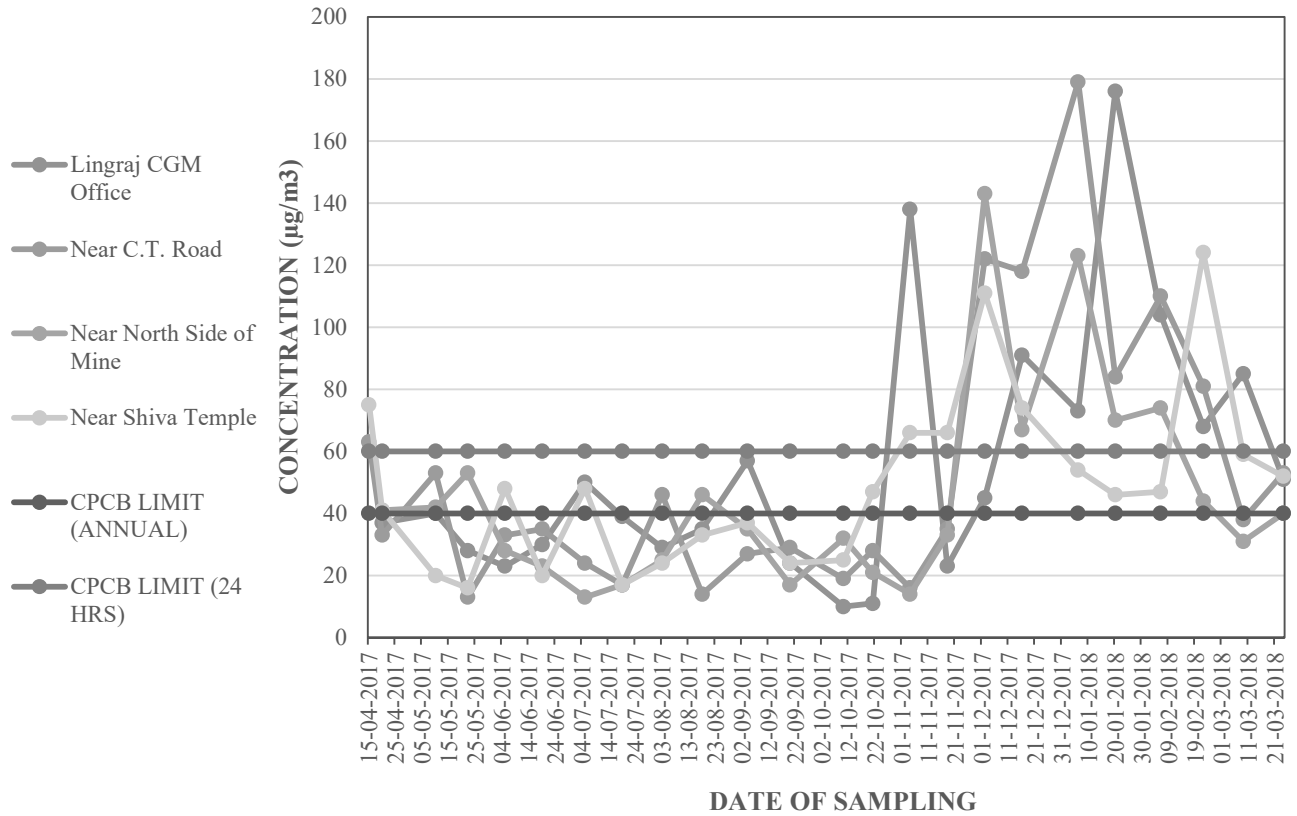
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
21/04/2017	41	198	3.63	<6	561	Sunny
12/05/2017	42	78	1.14	<6	160	Sunny
22/05/2017	53	122	2.45	10	291	Sunny & Afternoon Rainfall
05/06/2017	28	268	3.95	16	314	Sunny
19/06/2017	23	105	4.72	8	194	Sunny & Night Rainfall
05/07/2017	13	127	1.32	<6	260	Cloudy & Rainfall
19/07/2017	17	37	5.18	7	62	Cloudy & Night Rainfall
04/08/2017	25	55	1.43	6	107	Sunny & Rainfall
21/08/2017	46	73	4.16	<6	124	Sunny & Rainfall
05/09/2017	35	125	6.15	<6	204	Sunny
21/09/2017	17	34	3.18	<6	70	Cloudy
11/10/2017	32	46	1.15	1.74	88	Cloudy Rainfall
21/10/2017	21	134	25.29	17.73	146	Sunny & Cloudy
04/11/2017	14	106	5.8	5.35	229	Sunny
18/11/2017	33	42	2.63	11.25	89	Cloudy
02/12/2017	143	355	0.37	3.42	643	Sunny
16/12/2017	67	213	3.89	6.64	518	Sunny
06/01/2018	123	271	3.45	<6	569	Sunny
20/01/2018	70	87	30.07	<6	111	Sunny
05/02/2018	74	270	2	9	337	Sunny
20/02/2018	44	87	31.36	20.15	285	Sunny
08/03/2018	31	223	0.98	<6	490	Sunny
23/03/2018	40	127	4.26	31.68	287	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	143.00	355.00	31.36	31.68	643.00	
Minimum	13.00	34.00	0.37	1.74	62.00	
Average	44.87	138.39	6.46	11.00	266.91	
95 Percentile	118.10	270.90	29.59	24.19	568.20	
98 Percentile	134.20	318.04	30.79	28.68	610.44	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 34

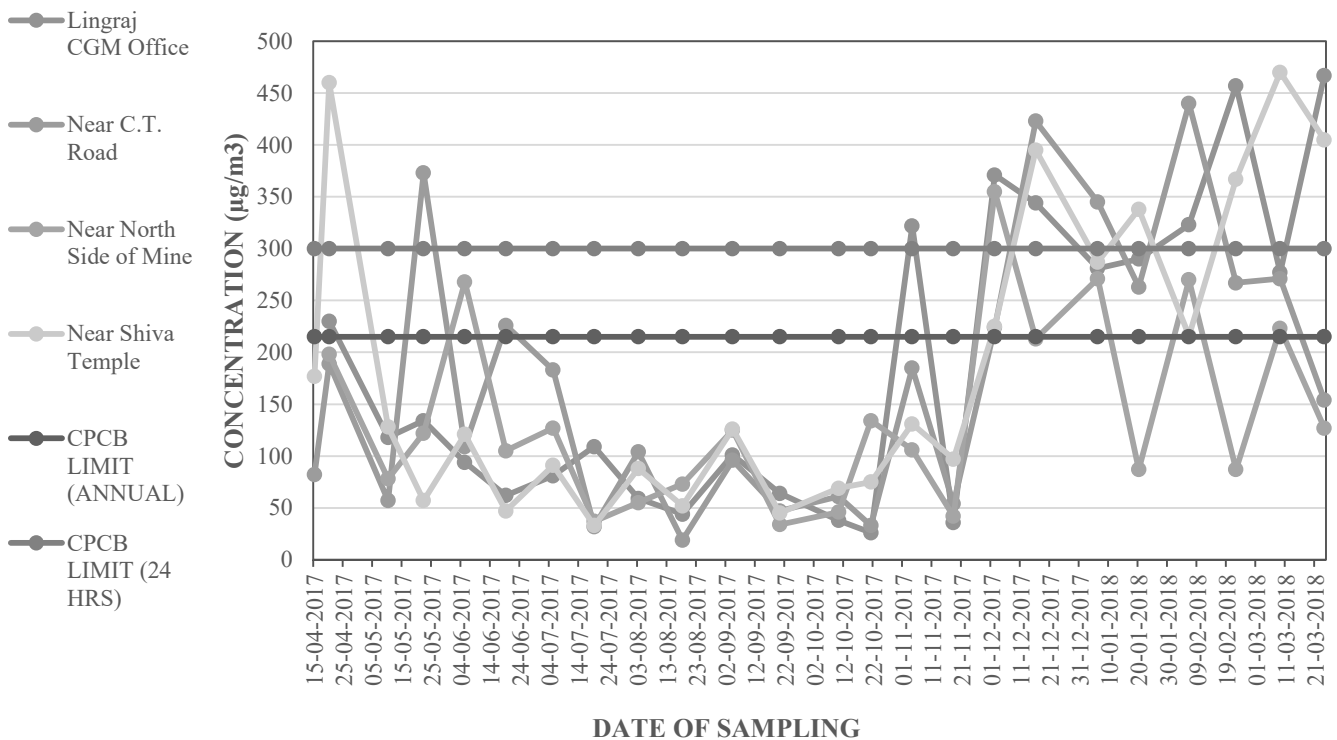
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Near Shiva Temple

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
15/04/2017	75	177	3.71	<6	246	Sunny.
20/04/2017	41	460	3.87	<6	874	Sunny.
11/05/2017	20	128	3.62	<6	283	Sunny.
25/05/2017	16	57	2.47	<6	161	Sunny.
06/06/2017	48	121	4.48	13	252	Sunny.
20/06/2017	20	47	4.82	6	81	Cloudy & Night Rainfall
06/07/2017	48	91	2.71	<6	249	Cloudy
20/07/2017	17	33	1.87	<6	65	Cloudy & Evening Rainfall
03/08/2017	24	88	1.36	13	166	Cloudy & Rainfall
18/08/2017	33	52	1.26	<6	68	Evening Heavy Rainfall
04/09/2017	37	126	3.76	<6	239	Sunny & Cloudy
20/09/2017	24	45	0.73	<6	79	Cloudy & Night Rainfall
04/10/2017	25	69	1.15	1.39	149	Cloudy
20/10/2017	47	75	1.76	0.9	151	Heavy Raifall
04/11/2017	66	131	1.01	2.5	240	Sunny
18/11/2017	66	97	1.57	10.87	147	Cloudy
02/12/2017	111	225	2.05	1.05	334	Sunny
16/12/2017	74	395	66.5	30.58	718	Sunny
06/01/2018	54	287	0.9	8.56	553	Sunny
20/01/2018	46	338	31.6	22.55	597	Sunny
06/02/2018	47	216	5.89	30.68	475	Sunny
21/02/2018	124	367	20.32	<6	562	Sunny
09/03/2018	59	470	2.8	119.77	757	Sunny
24/03/2018	52	405	3.64	29.01	466	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	124.00	470.00	66.50	119.77	874.00	
Minimum	16.00	33.00	0.73	0.90	65.00	
Average	48.92	187.50	7.24	20.70	329.67	
95 Percentile	105.60	451.75	29.91	61.86	751.15	
98 Percentile	118.02	465.40	50.45	96.61	820.18	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

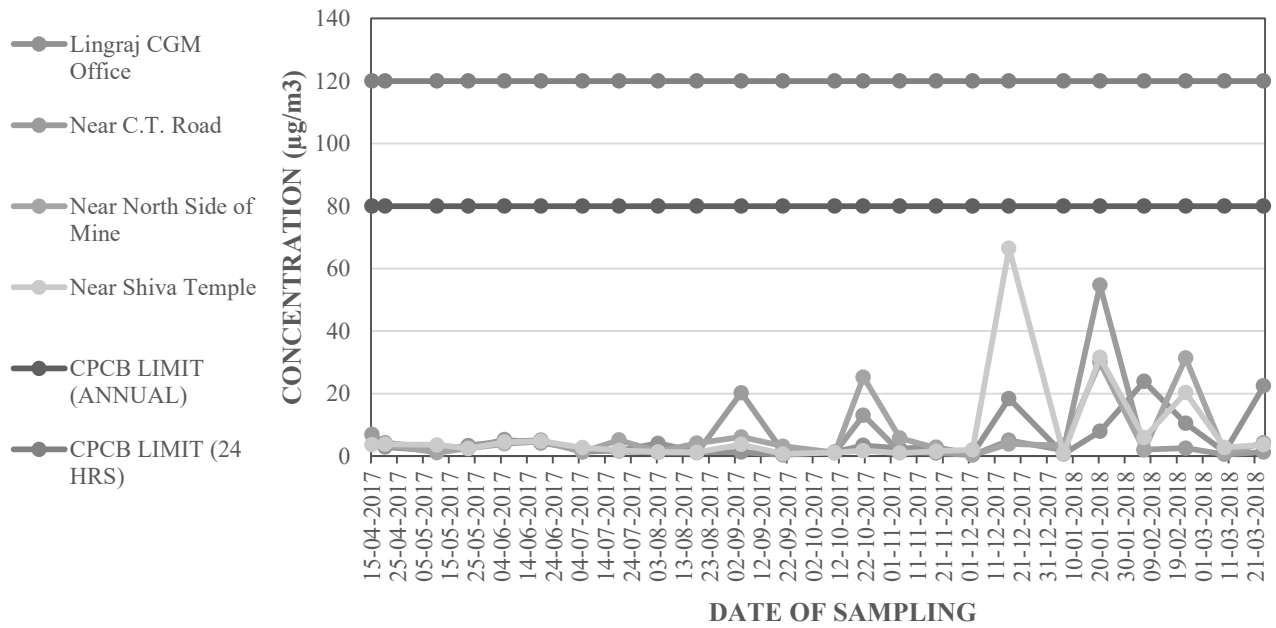
Graph Showing PM_{2.5} of Lingraj OCP



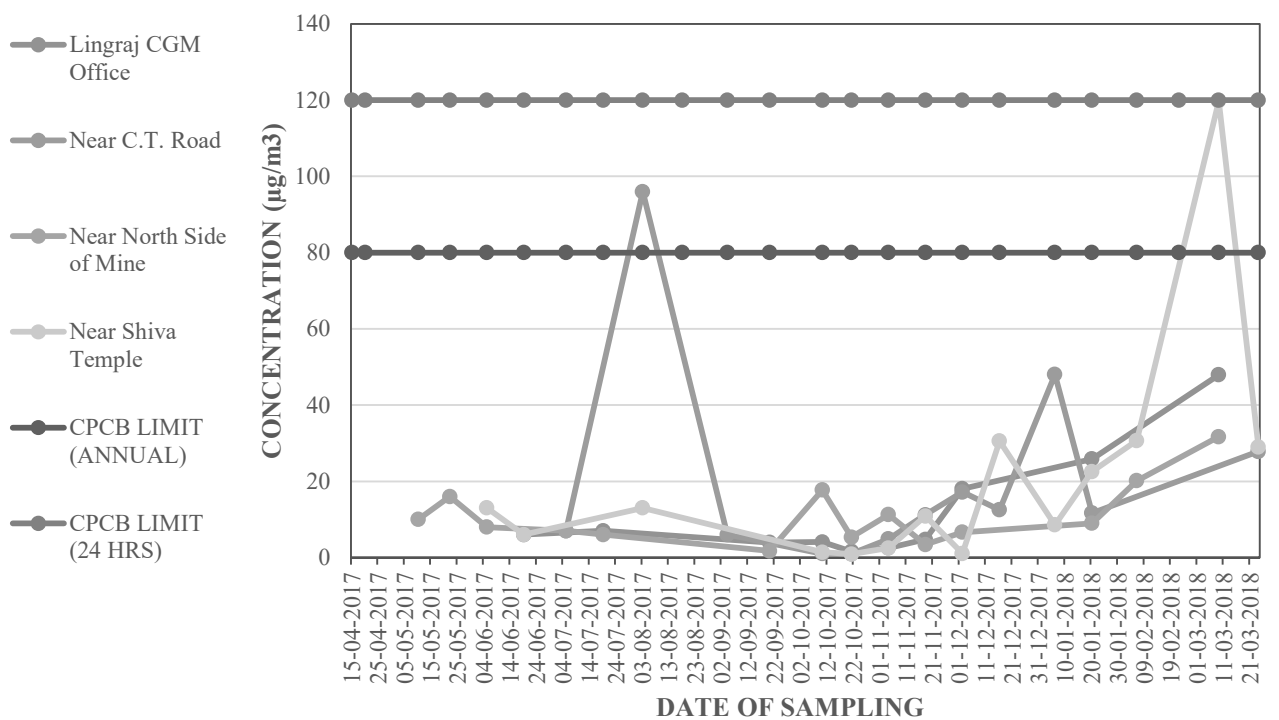
Graph Showing PM₁₀ of Lingraj OCP



Graph Showing SO₂ of Lingraj OCP



Graph Showing NO_x of Lingraj OCP



Graph Showing SPM of Lingraj OCP

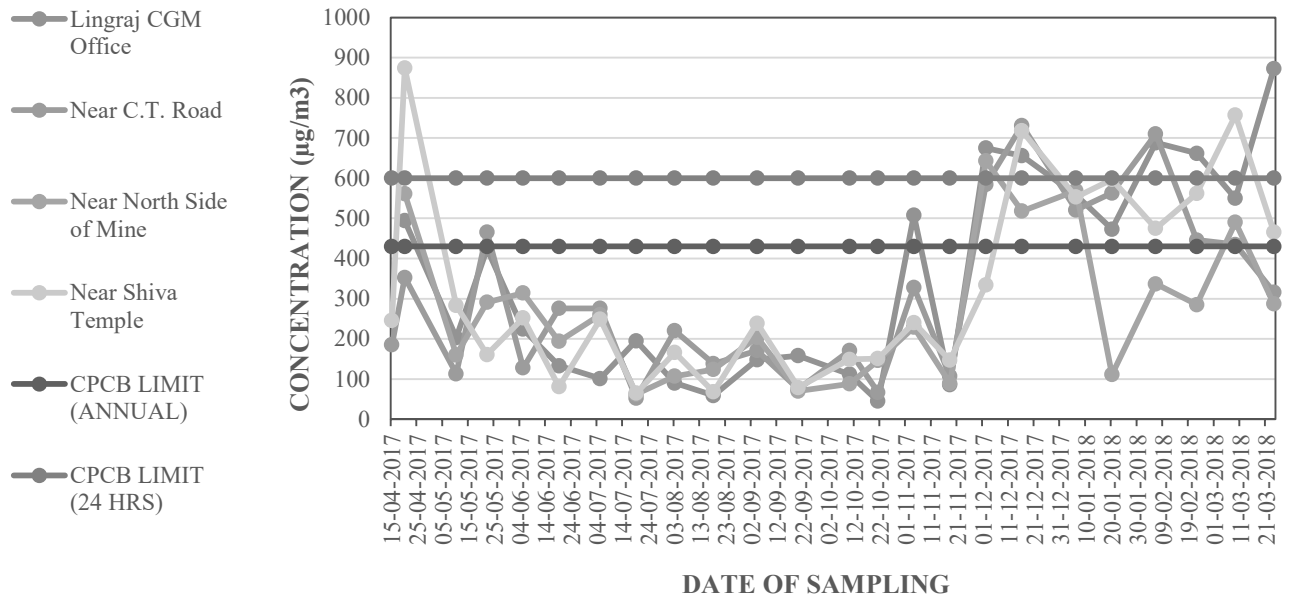


Table: 35

**Area: Kaniha
 Project: Kaniha OCP
 Monitoring Station: New Time Office-Near Z-Patch**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
19/04/2017	98	121	6.12	17	350	Sunny
04/05/2017	26	143	1.61	<6	345	Sunny
18/05/2017	20	124	2.95	15	367	Sunny & Night Rainfall
06/06/2017	26	84	7.12	<6	301	Sunny & Rainfall
20/06/2017	14	28	4.94	<6	52	Cloudy & Heavy Rainfall
06/07/2017	47	85	1.82	<6	205	Cloudy
20/07/2017	25	40	1.98	<6	126	Cloudy & Evening Rainfall
07/08/2017	24	45	1.19	<6	128	Evening Rainfall
22/08/2017	24	138	1.25	<6	285	Sunny & Rainfall
06/09/2017	59	162	7.78	<6	346	Sunny
22/09/2017	28	90	1.48	12	170	Cloudy
09/10/2017	12	55	4.1	3.84	169	Sunny & Cloudy
24/10/2017	38	108	1.51	0.72	176	Cloudy
09/11/2017	36	213	2.87	12.37	474	Sunny
24/11/2017	48	137	0.95	9.85	297	Sunny
06/12/2017	78	210	0.54	3.33	342	Sunny
21/12/2017	27	464	2.94	4.15	489	Sunny
04/01/2018	90	263	0.51	9.04	579	Sunny
18/01/2018	61	159	7.97	15.8	341	Sunny
04/02/2018	39	238	5.48	17.56	470	Sunny
19/02/2018	46	252	9.87	<6	475	Sunny
07/03/2018	51	311	1.16	24.48	498	Sunny
22/03/2018	40	212	3.39	22.17	558	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	98.00	464.00	9.87	24.48	579.00	
Minimum	12.00	28.00	0.51	0.72	52.00	
Average	41.61	160.09	3.46	11.95	327.96	
95 Percentile	88.80	306.20	7.95	22.98	552.00	
98 Percentile	94.48	396.68	9.03	23.88	569.76	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 36

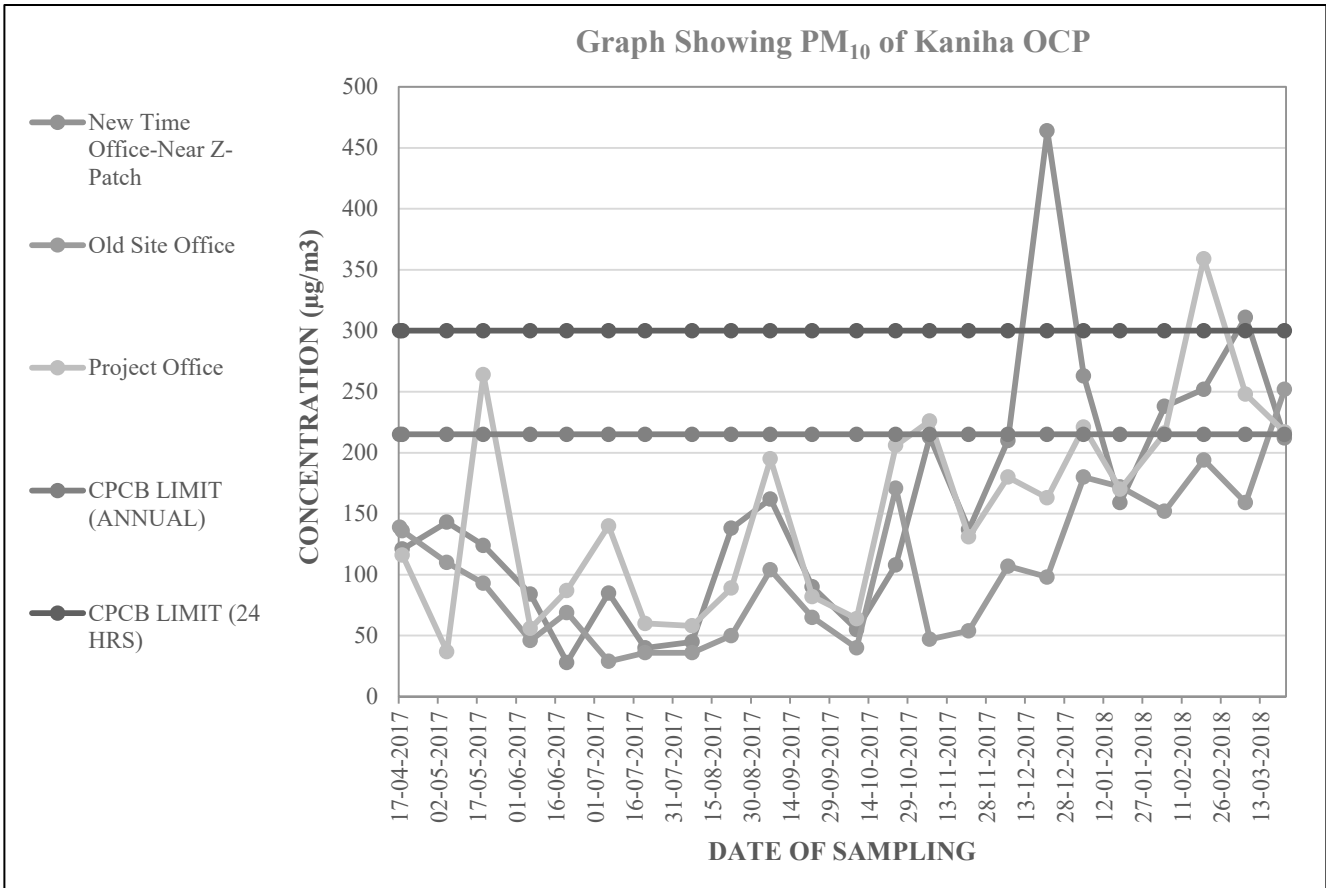
**Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Old Site Office**

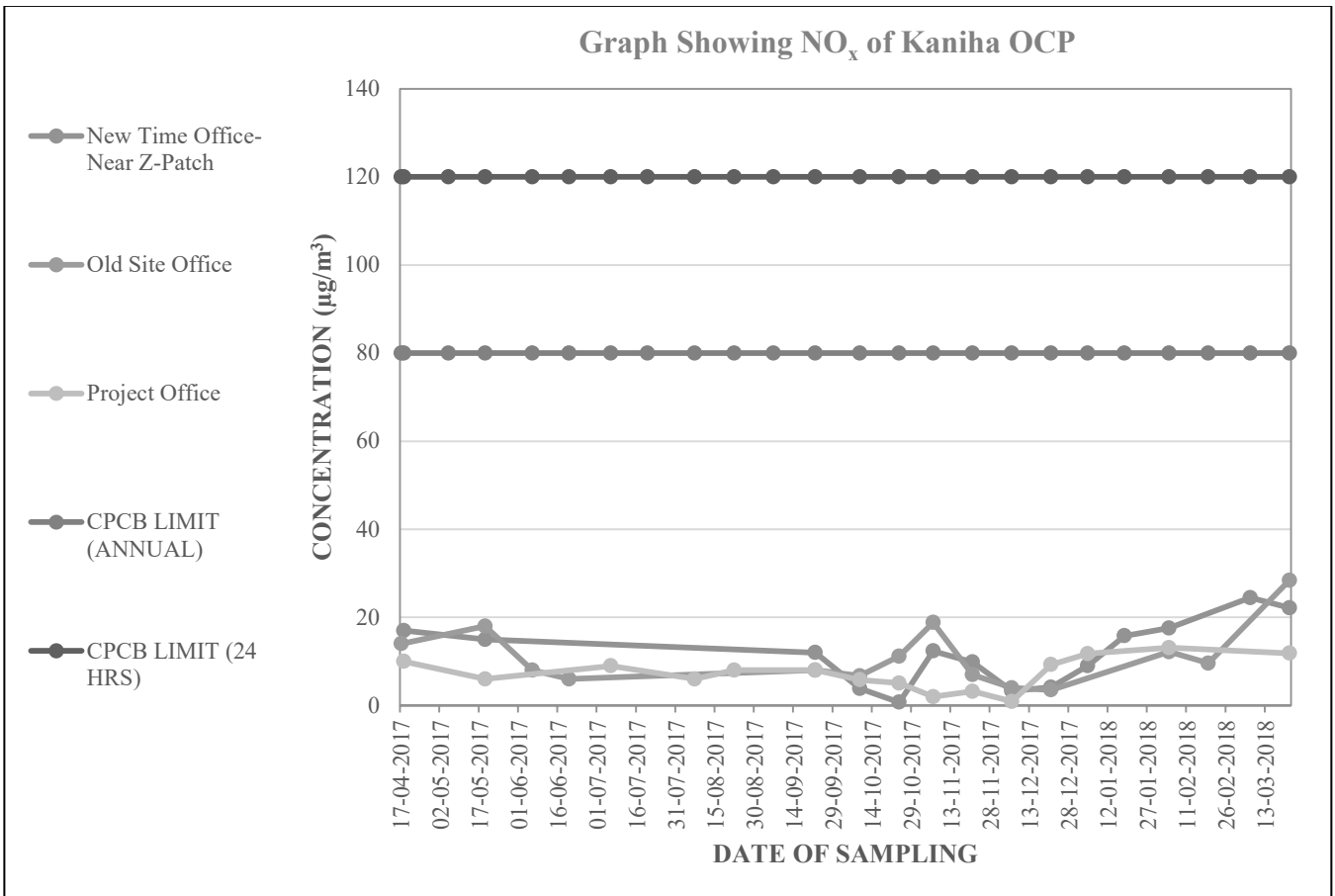
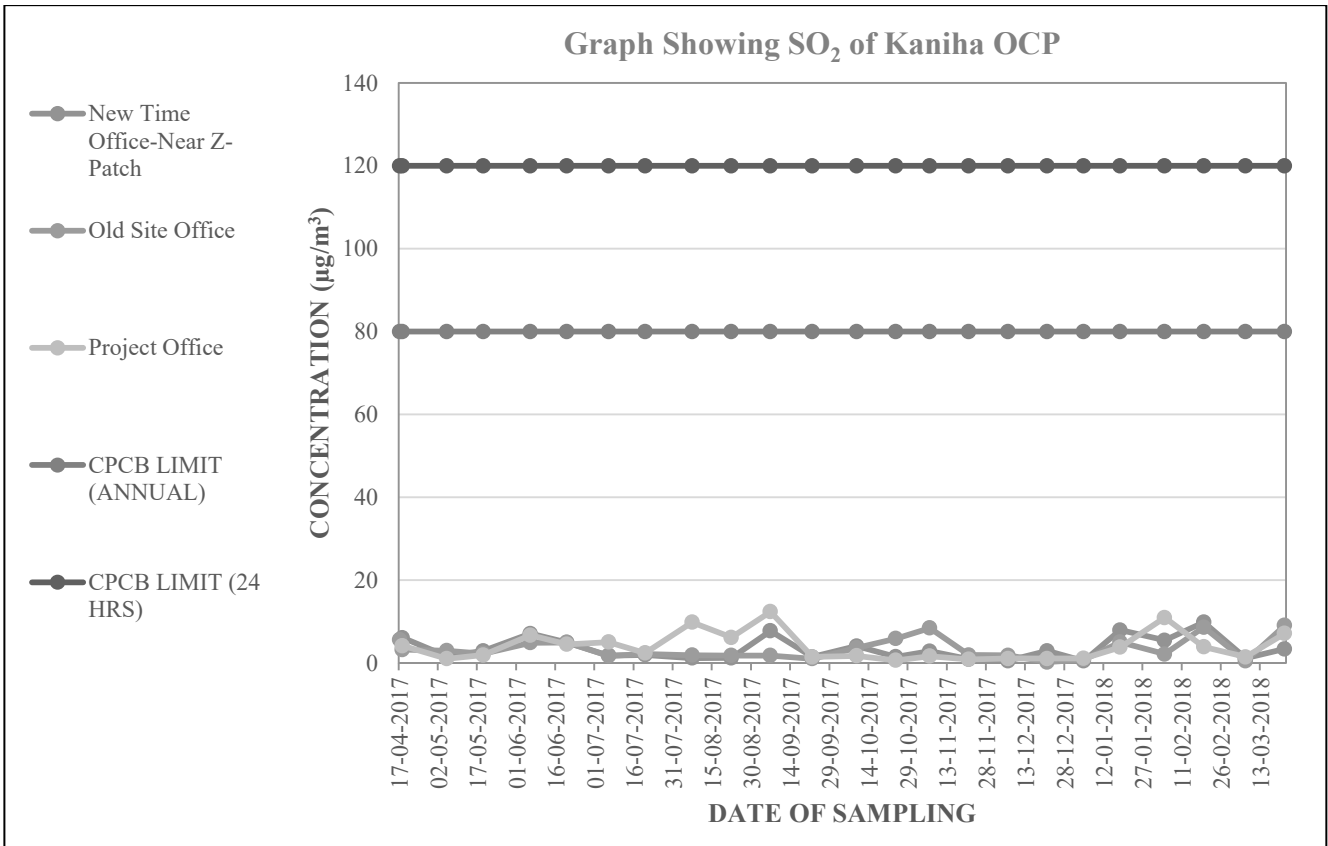
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
17/04/2017	71	139	5.63	14	226	Sunny
18/04/2017	81	136	3.24	<6	288	Sunny
05/05/2017	42	110	2.96	<6	173	Sunny & Evening Rainfall
19/05/2017	64	93	2.27	18	214	Sunny
06/06/2017	18	46	4.91	8	111	Sunny & Evening Rainfall
20/06/2017	18	69	4.98	6	94	Sunny & Night Rainfall
06/07/2017	18	29	1.75	<6	74	Cloudy
20/07/2017	18	36	2.21	<6	53	Cloudy & Evening Rainfall
07/08/2017	22	36	1.88	<6	61	Evening Rainfall
22/08/2017	45	50	1.83	<6	176	Sunny & Rainfall
06/09/2017	38	104	1.82	<6	201	Sunny
22/09/2017	50	65	1.04	8	85	Cloudy
09/10/2017	17	40	3.66	6.71	153	Sunny & Cloudy
24/10/2017	28	171	5.9	11.17	232	Sunny
06/11/2017	26	47	8.46	18.81	110	Sunny
21/11/2017	35	54	1.95	6.99	138	Sunny
06/12/2017	91	107	1.87	3.98	260	Sunny
21/12/2017	22	98	0.25	3.52	130	Sunny
04/01/2018	71	180	0.81	<6	295	Sunny
18/01/2018	53	172	5.07	<6	248	Sunny
04/02/2018	33	152	2.18	12.17	269	Sunny
19/02/2018	59	194	8.65	9.61	351	Sunny
07/03/2018	17	159	0.49	<6	367	Sunny
22/03/2018	118	252	9.09	28.41	376	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	118.00	252.00	9.09	28.41	376.00	
Minimum	17.00	29.00	0.25	3.52	53.00	
Average	43.96	105.79	3.45	11.10	195.21	
95 Percentile	89.50	191.90	8.62	22.17	364.60	
98 Percentile	105.58	225.32	8.89	25.91	371.86	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 37

**Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Project Office**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
19/04/2017	68	116	4.16	10	295	Sunny
05/05/2017	25	37	1.05	<6	155	Evening Rainfall
19/05/2017	48	264	1.92	6	493	Sunny
06/06/2017	20	56	6.71	<6	126	Sunny & Evening Rainfall
20/06/2017	74	87	4.52	<6	122	Sunny & Night Rainfall
06/07/2017	51	140	5.05	9	419	Cloudy
20/07/2017	11	60	2.45	<6	143	Cloudy & Evening Rainfall
07/08/2017	33	58	9.87	6	96	Evening Rainfall
22/08/2017	32	89	6.19	8	198	Sunny & Rainfall
06/09/2017	27	195	12.4	<6	380	Sunny
22/09/2017	38	82	1.49	8	128	Cloudy
09/10/2017	32	64	1.76	5.83	194	Sunny & Cloudy
24/10/2017	16	206	0.67	5.06	364	Sunny
06/11/2017	26	226	1.66	2	460	Sunny
21/11/2017	27	131	0.89	3.19	253	Sunny
06/12/2017	58	180	1.1	0.92	378	Sunny
21/12/2017	58	163	1.09	9.29	306	Sunny
04/01/2018	19	221	1.11	11.75	398	Sunny
18/01/2018	8	170	3.84	<6	347	Sunny
04/02/2018	57	216	10.97	13.1	459	Sunny
19/02/2018	33	359	3.92	<6	594	Sunny
07/03/2018	48	248	1.47	<6	436	Sunny
22/03/2018	50	217	7.13	11.86	455	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	74.00	359.00	12.40	13.10	594.00	
Minimum	8.00	37.00	0.67	0.92	96.00	
Average	37.35	155.87	3.97	7.33	313.00	
95 Percentile	67.00	262.40	10.86	12.23	489.70	
98 Percentile	71.36	317.20	11.77	12.75	549.56	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





Graph Showing SPM of Kaniha OCP

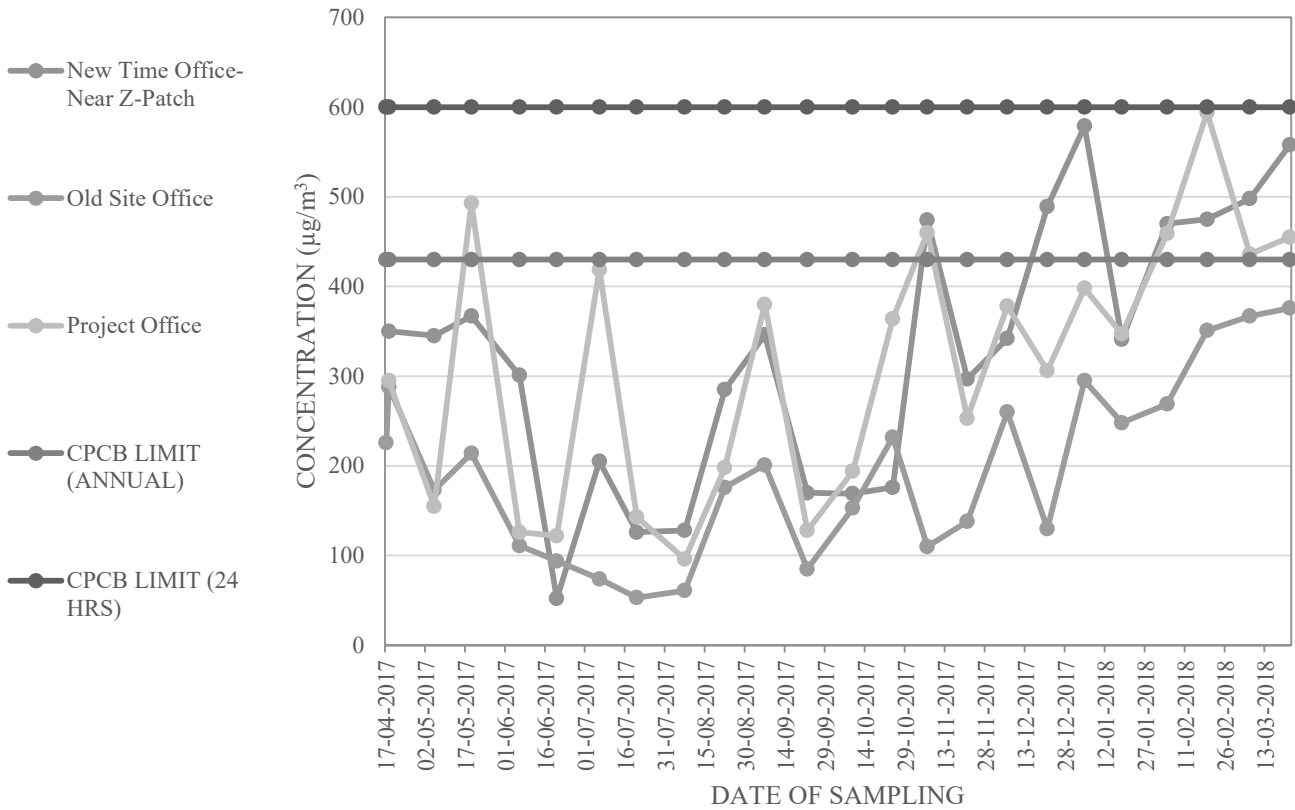


Table: 38

Area: Kaniha

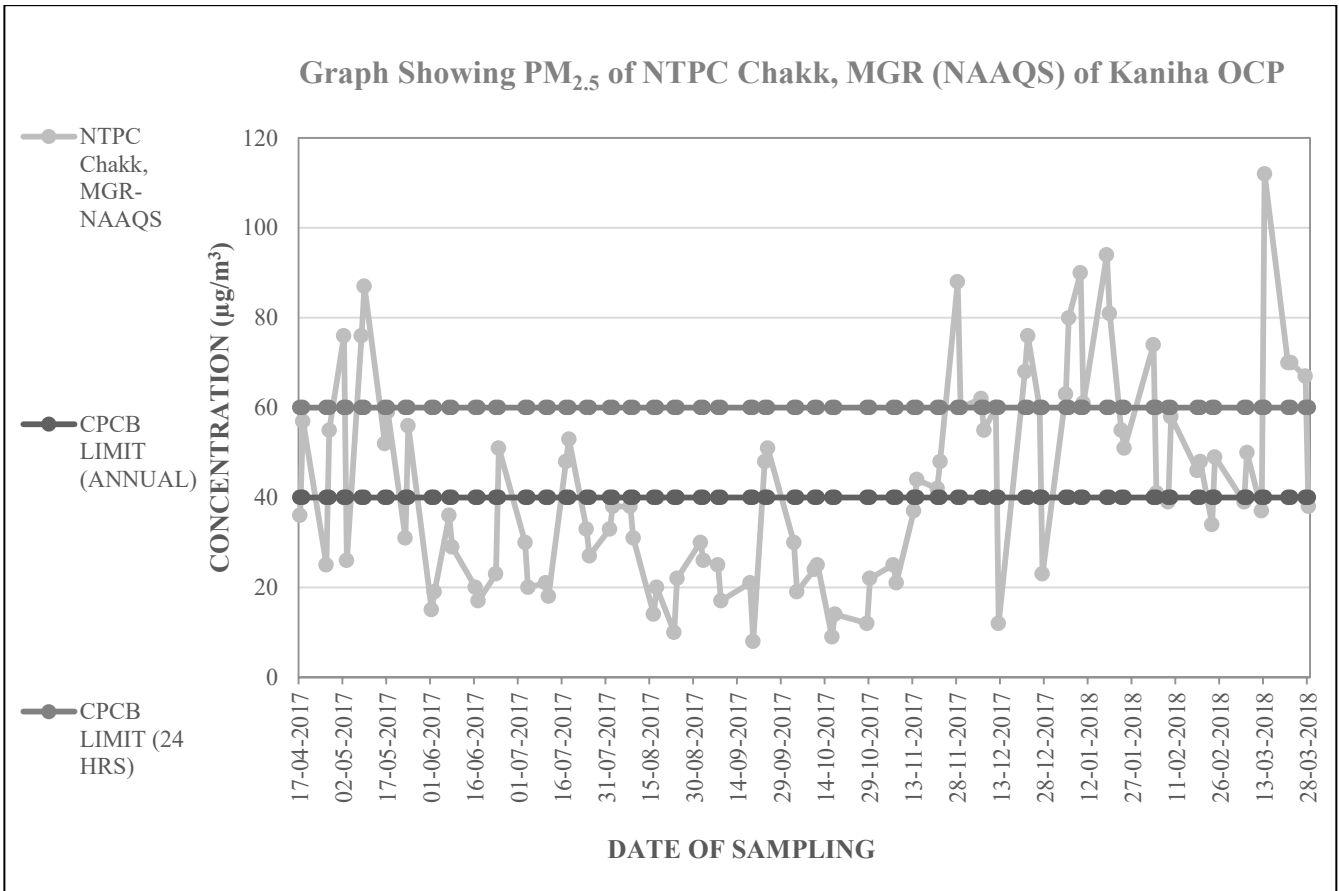
Project: Kaniha OCP

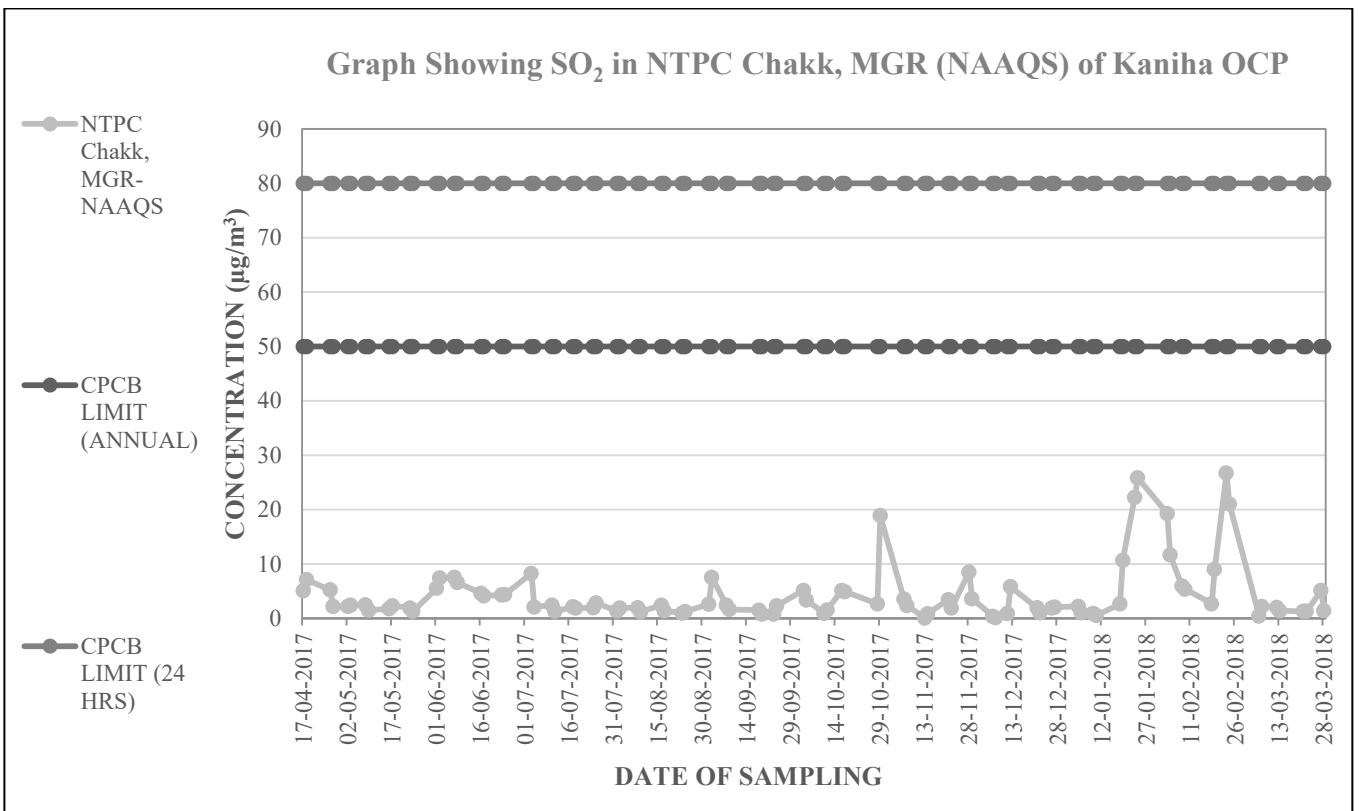
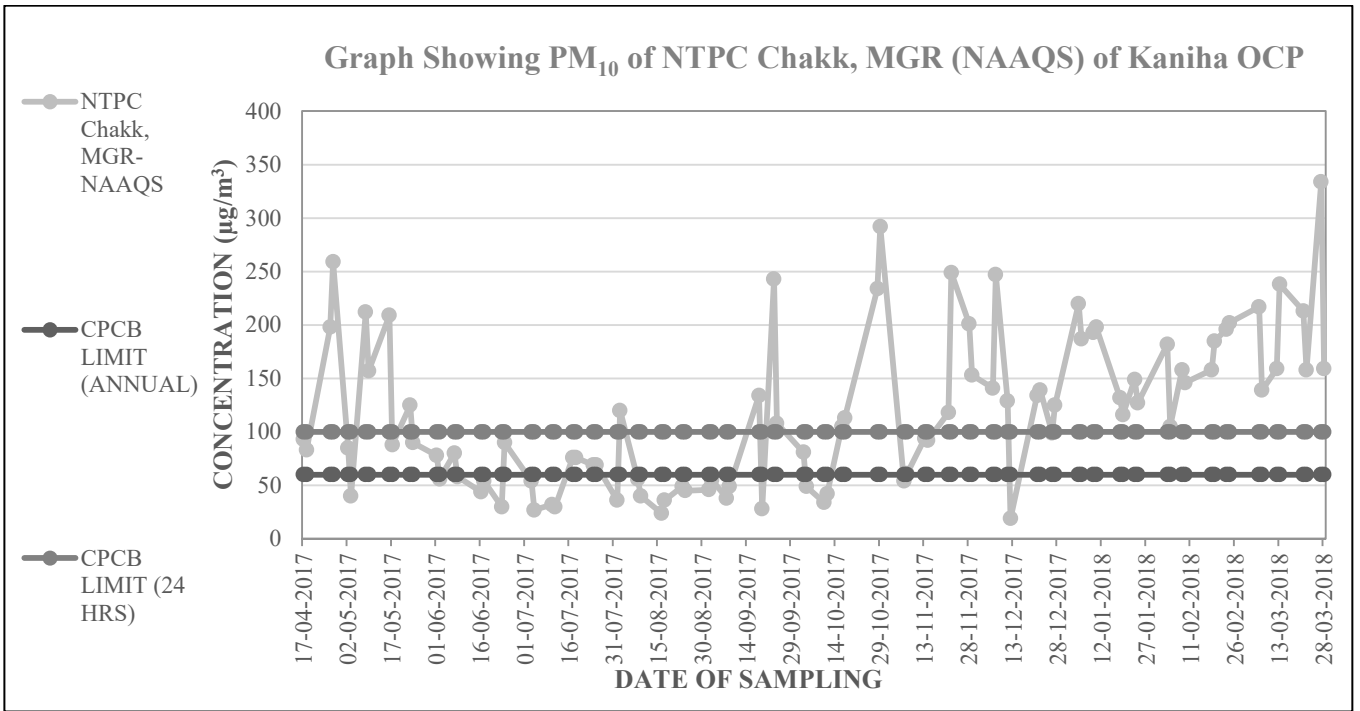
Monitoring Station: NTPC Chakk, MGR- NAAQS

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
17/04/2017	36	93	5.09	9	207	Sunny
18/04/2017	57	83	7.14	15	132	Sunny
26/04/2017	25	198	5.26	<6	404	Sunny
27/04/2017	55	259	2.18	<6	745	Sunny
02/05/2017	76	85	2.2	<6	270	Sunny
03/05/2017	26	40	2.44	<6	109	Evening Rainfall
08/05/2017	76	212	2.53	<6	345	Sunny
09/05/2017	87	157	1.49	<6	234	Evening Rainfall
16/05/2017	52	209	1.82	24	447	Sunny
17/05/2017	59	88	2.34	16	161	Sunny
23/05/2017	31	125	1.94	18	317	Sunny
24/05/2017	56	90	1.34	17	237	Sunny
01/06/2017	15	78	5.54	<6	192	Sunny & Evening Rainfall
02/06/2017	19	56	7.42	6	126	Sunny & Rainfall
07/06/2017	36	80	7.58	<6	165	Sunny & Cloudy
08/06/2017	29	58	6.61	<6	172	Sunny
16/06/2017	20	44	4.63	<6	85	Night Rainfall
17/06/2017	17	54	4.13	<6	91	Sunny
23/06/2017	23	30	4.35	<6	57	Cloudy & Rainfall
24/06/2017	51	90	4.38	<6	152	Cloudy & Rainfall
03/07/2017	30	54	8.28	<6		Cloudy
04/07/2017	20	27	2.11	<6		Cloudy
10/07/2017	21	32	2.46	<6		Evening Heavy Rainfall
11/07/2017	18	30	1.32	<6		Cloudy & Rainfall
17/07/2017	48	76	2.13	<6		Cloudy & Night Rainfall
18/07/2017	53	76	1.89	<6		Cloudy & Evening Rainfall
24/07/2017	33	69	1.95	<6		Cloudy & Night Rainfall
25/07/2017	27	69	2.83	<6		Cloudy & Rainfall
01/08/2017	33	36	1.37	7	73	Cloudy & Night Rainfall
02/08/2017	38	120	1.94	<6	148	Evening Rainfall
08/08/2017	38	56	1.96	<6	59	Sunny & Rainfall
09/08/2017	31	40	1.22	<6	78	Cloudy & Night Rainfall
16/08/2017	14	24	2.45	<6	69	Cloudy & Rainfall
17/08/2017	20	36	1.4	<6	62	Night Rainfall
23/08/2017	10	49	1	27	137	Evening Rainfall
24/08/2017	22	45	1.27	<6	115	Afternoon Rainfall
01/09/2017	30	46	2.6	10	82	Cloudy & Evening Rainfall
02/09/2017	26	55	7.56	<6	99	Cloudy & Night Rainfall
07/09/2017	25	38	2.42	<6	79	Cloudy & Evening Rainfall

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
08/09/2017	17	49	1.66	<6	92	Sunny & Night Rainfall
18/09/2017	21	134	1.51	9	171	Cloudy & Evening Rainfall
19/09/2017	8	28	0.8	<6	52	Cloudy & Night Rainfall
23/09/2017	48	243	0.81	<6	278	Sunny & Cloudy Rainfall
24/09/2017	51	108	2.33	<6	153	Sunny & Cloudy
03/10/2017	30	81	5.15	3.63	108	Cloudy
04/10/2017	19	49	3.37	2.63	233	Cloudy
10/10/2017	24	34	0.94	2.06	72	Sunny & Cloudy
11/10/2017	25	42	1.58	2.43	65	Cloudy & Rainfall
16/10/2017	9	105	5.17	1.05	185	Sunny
17/10/2017	14	113	4.94	5.3	231	Sunny
28/10/2017	12	234	2.68	5.02	246	Sunny
29/10/2017	22	292	18.9	5.21	336	Cloudy
06/11/2017	25	54	3.54	9.69	169	Sunny
07/11/2017	21	61	2.38	1.19	214	Sunny
13/11/2017	37	94	0.1	2.83	281	Sunny
14/11/2017	44	92	0.87	4.19	255	Mostly Cloudy
21/11/2017	42	118	3.46	4.62	211	Sunny
22/11/2017	48	249	1.9	8.61	418	Sunny
28/11/2017	88	201	8.53	7.78	327	Sunny & Cloudy
29/11/2017	60	153	3.63	7.03	287	Sunny & Cloudy
06/12/2017	62	141	0.39	0.54	264	Sunny
07/12/2017	55	247	0.16	5	377	Sunny
11/12/2017	60	129	0.89	4.43	217	Sunny
12/12/2017	12	19	5.84	1.2	74	Sunny
21/12/2017	68	134	1.95	7.83	217	Sunny
22/12/2017	76	139	1.03	4.14	244	Sunny
26/12/2017	60	99	1.94	5.57	237	Sunny
27/12/2017	23	125	2.07	7.72	184	Sunny
04/01/2018	63	220	2.21	10.06	359	Sunny
05/01/2018	80	187	1.01	8.93	355	Sunny
09/01/2018	90	193	0.93	10.9	302	Sunny
10/01/2018	61	198	0.55	24.21	328	Sunny
18/01/2018	94	132	2.67	<6	217	Sunny
19/01/2018	81	116	10.7	<6	236	Sunny
23/01/2018	55	149	22.26	21.33	286	Sunny
24/01/2018	51	127	25.83	<6	238	Sunny
03/02/2018	74	182	19.27	7.01	241	Sunny
04/02/2018	41	105	11.66	2.58	205	Sunny
08/02/2018	39	158	5.97	17.4	312	Sunny
09/02/2018	58	146	5.41	12	294	Sunny
18/02/2018	46	158	2.69	<6	339	Sunny
19/02/2018	48	185	9.04	11.48	420	Sunny

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
23/02/2018	34	196	26.76	<6	282	Sunny
24/02/2018	49	202	21.06	<6	363	Sunny
06/03/2018	39	217	0.46	7.85	441	Sunny
07/03/2018	50	139	2.2	<6	327	Sunny
12/03/2018	37	159	2.03	<6	292	Sunny
13/03/2018	112	238	1.4	<6	465	Sunny
21/03/2018	70	213	1.31	<6	365	Sunny
22/03/2018	70	158	1.31	<6	335	Sunny
27/03/2018	67	334	5.12	134.53	840	Sunny
28/03/2018	38	159	1.47	12.32	321	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	112.00	334.00	26.76	134.53	840.00	
Minimum	8.00	19.00	0.10	0.54	52.00	
Average	42.51	118.97	4.35	11.42	238.21	
95 Percentile	83.70	244.80	19.07	24.14	437.85	
98 Percentile	90.72	264.94	22.90	33.45	560.20	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





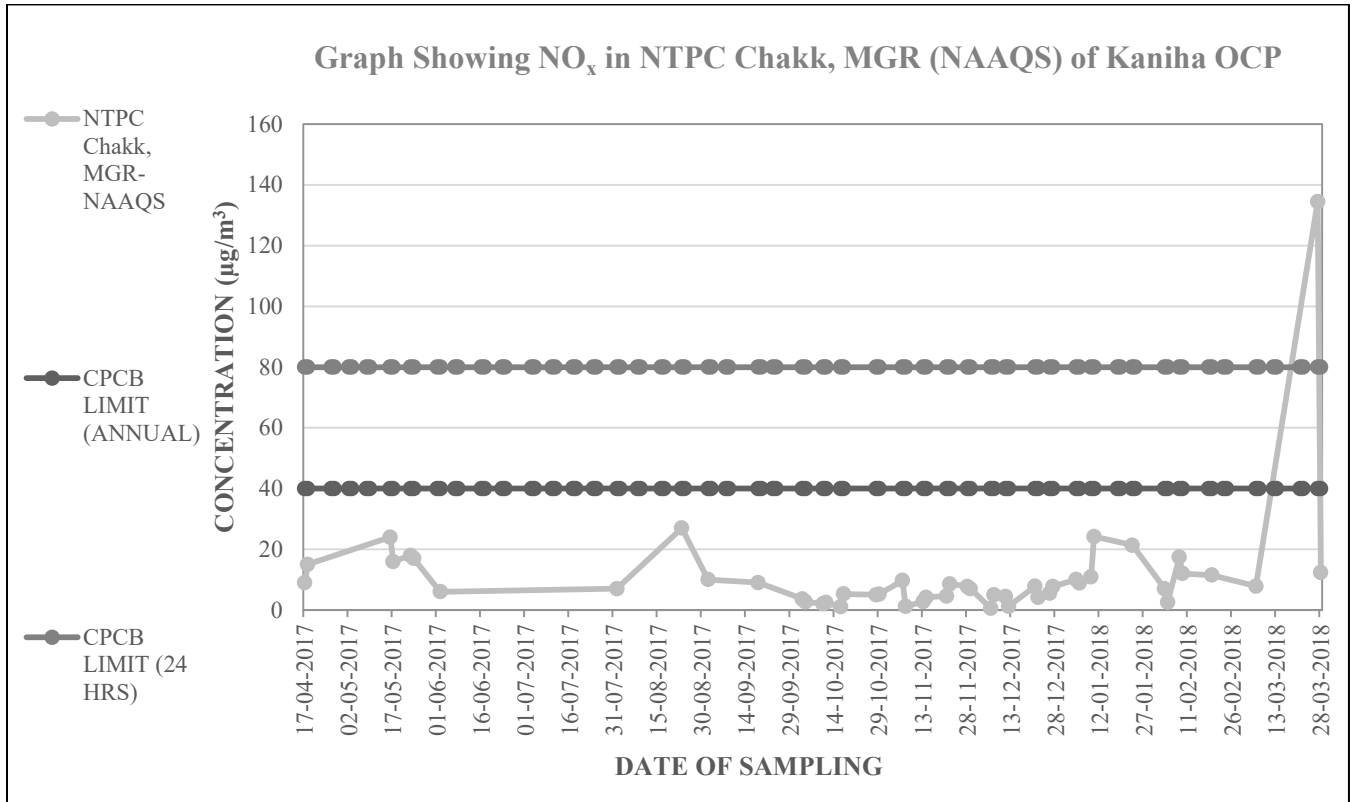


Table: 39

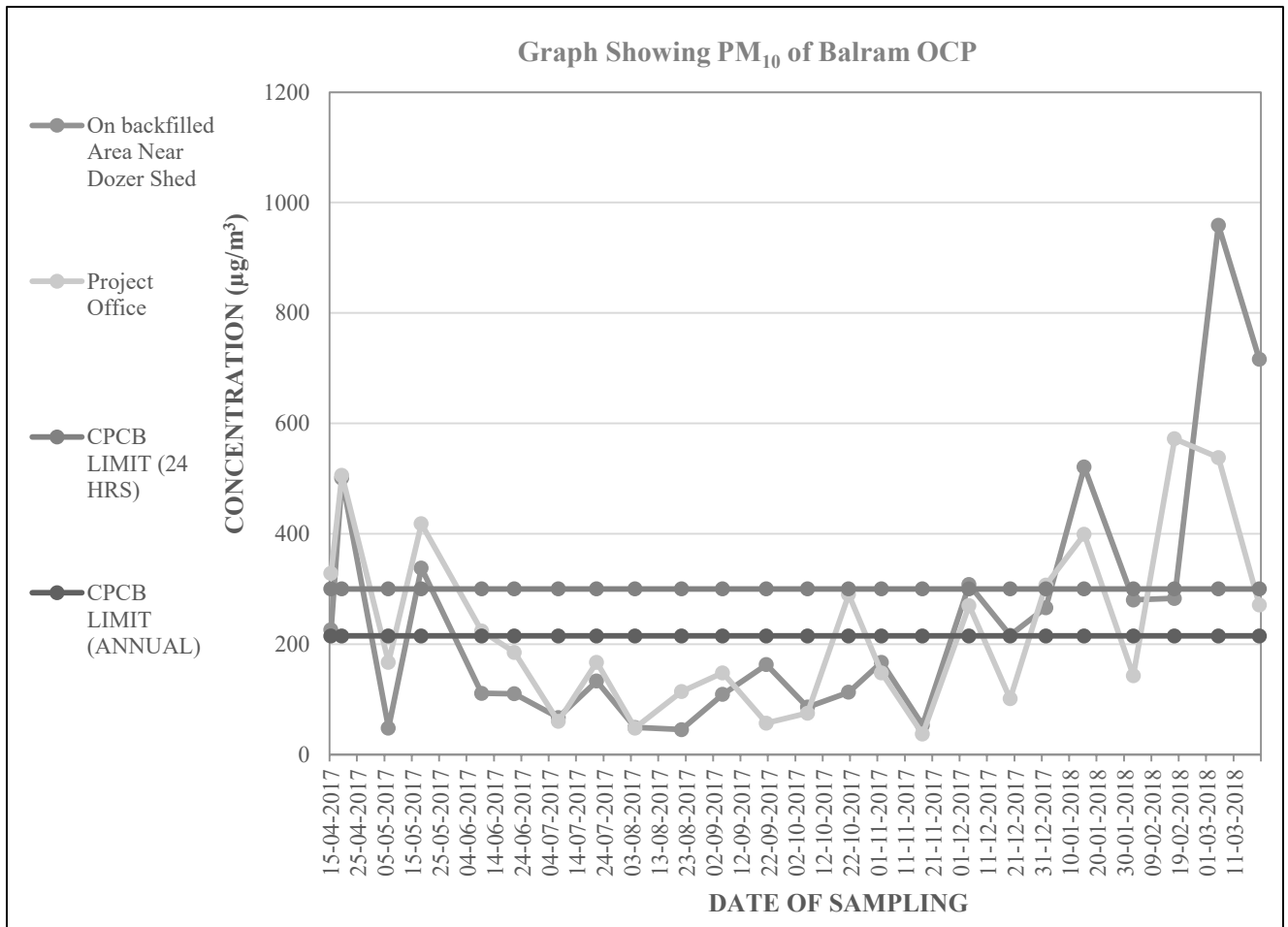
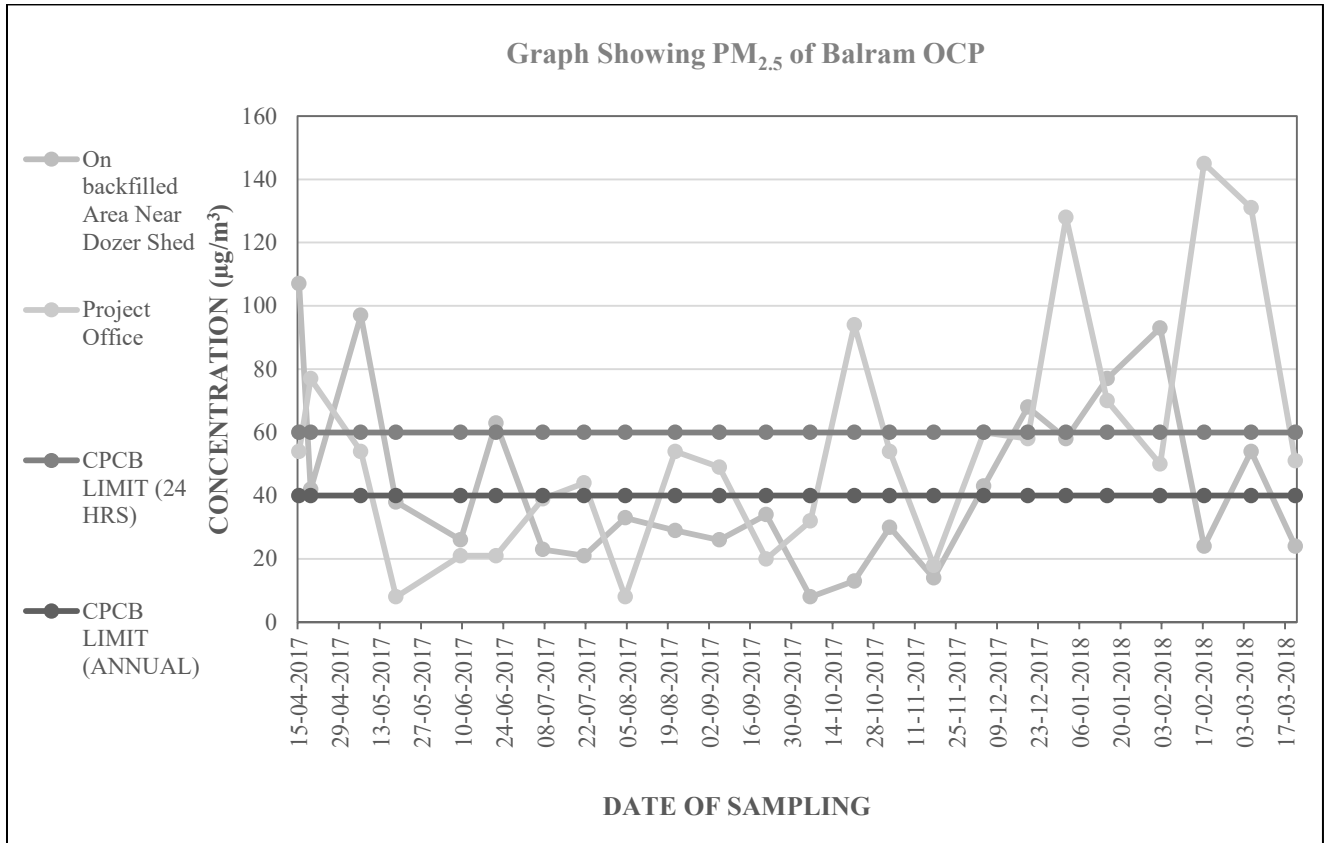
Area: Hingula Area
Project: Balram OCP
Monitoring Station: On Backfilled Area Near Dozer Shed

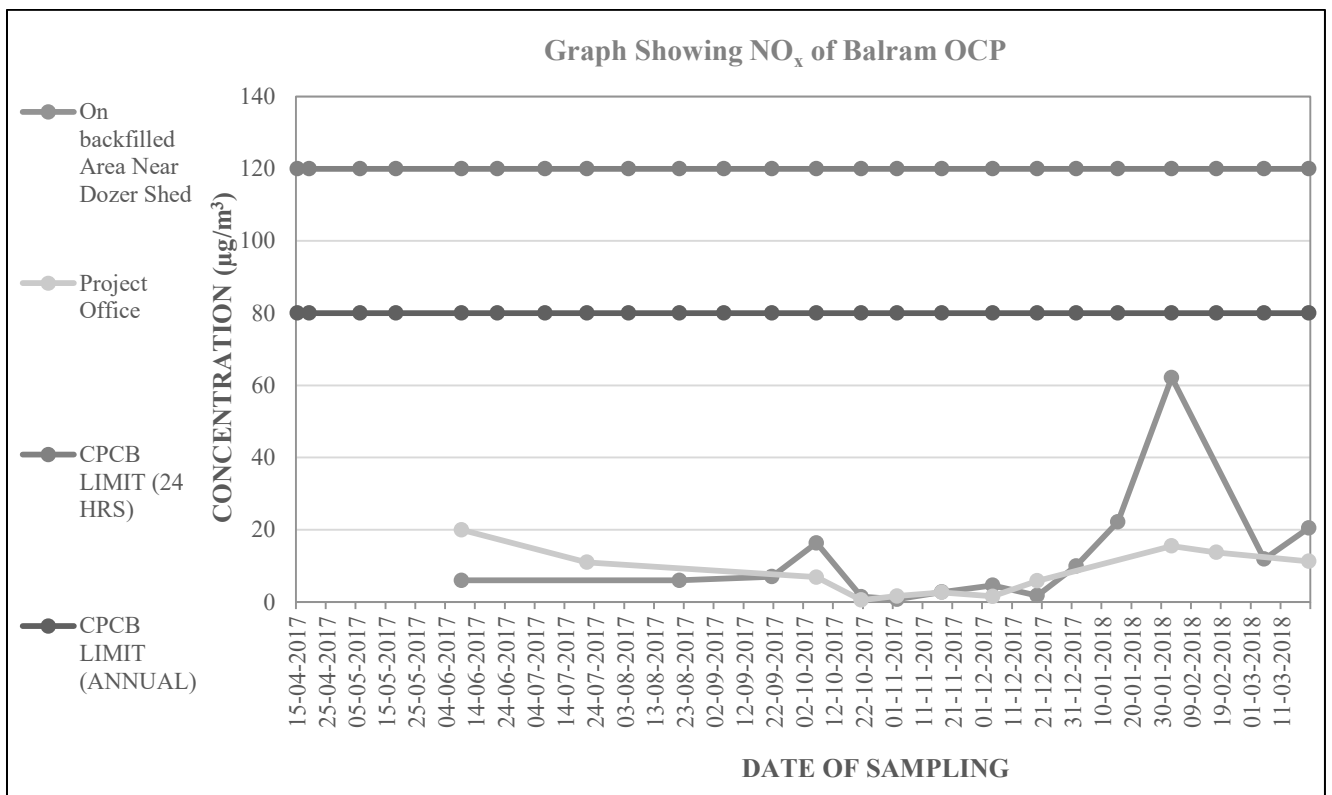
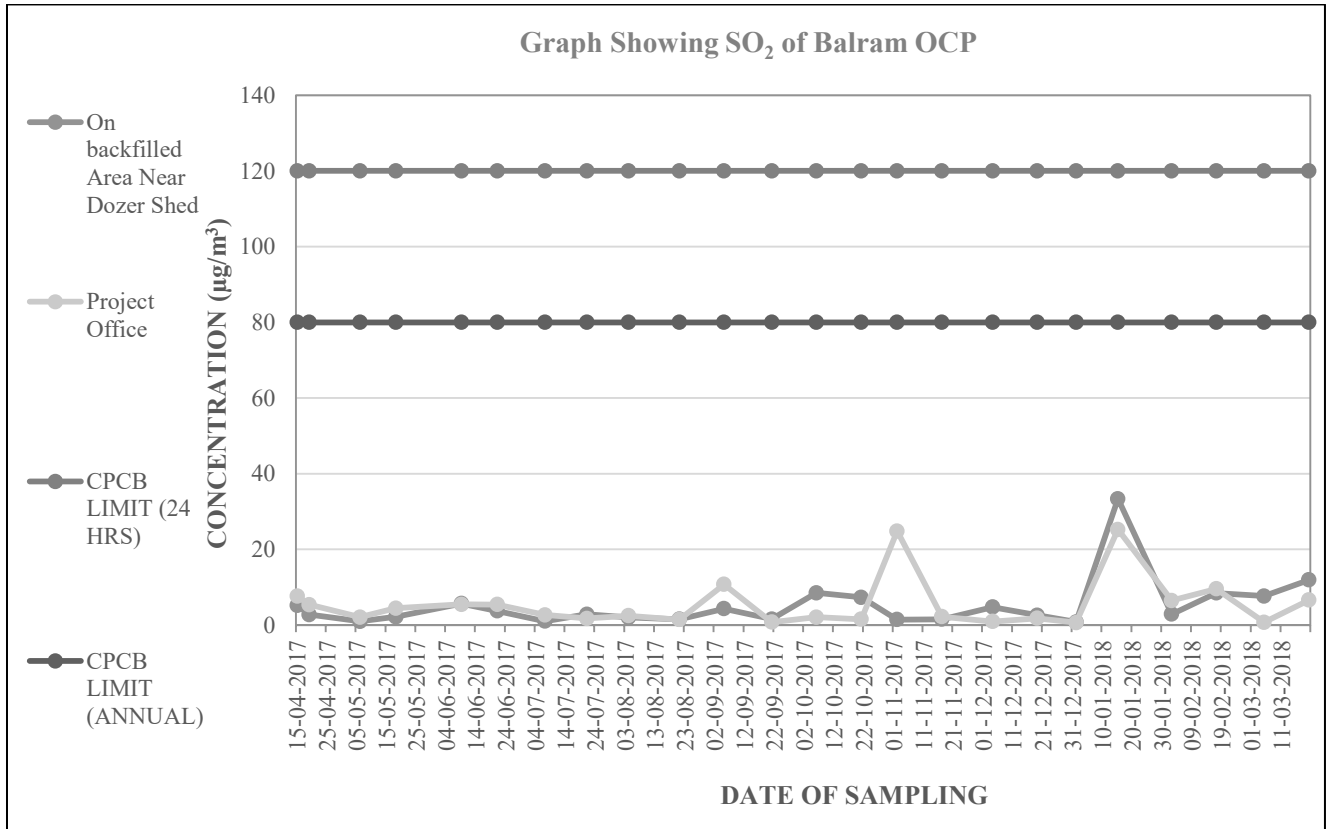
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
15-04-2017	107	226	5.23	<6	501	Sunny
19-04-2017	42	501	2.78	<6	824	Sunny
06-05-2017	97	48	0.97	<6	115	Sunny
18-05-2017	38	338	2.18	<6	530	Sunny & Night Rainfall
09-06-2017	26	111	5.66	6	289	Sunny & Cloudy
21-06-2017	63	110	3.74	<6	219	Cloudy & Rainfall
07-07-2017	23	67	1.04	<6	96	Cloudy & Rainfall
21-07-2017	21	133	2.86	<6	328	Cloudy & Evening Rainfall
04-08-2017	33	49	2.02	<6	77	Sunny & Rainfall
21-08-2017	29	45	1.55	6	139	Sunny & Rainfall
05-09-2017	26	109	4.31	<6	193	Sunny
21-09-2017	34	163	1.6	7	192	Cloudy
06-10-2017	8	86	8.52	16.34	185	Cloudy
21-10-2017	13	113	7.31	1.48	362	Sunny & Cloudy
02-11-2017	30	167	1.47	0.75	388	Sunny
17-11-2017	14	53	1.52	2.77	81	Night Rainfall
04-12-2017	43	308	4.75	4.6	599	Sunny
19-12-2017	68	216	2.58	1.8	366	Sunny
01-01-2018	58	266	0.83	9.96	542	Sunny
15-01-2018	77	521	33.36	22.22	1329	Sunny
02-02-2018	93	280	2.9	62.18	531	Sunny
17-02-2018	24	283	8.47	<6	641	Sunny
05-03-2018	54	959	7.65	11.87	1016	Sunny
20-03-2018	24	716	11.92	20.51	783	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	107.00	959.00	33.36	62.18	1329.00	
Minimum	8.00	45.00	0.83	0.75	77.00	
Average	43.54	244.50	5.22	12.39	430.25	
95 Percentile	96.40	686.75	11.41	36.21	987.20	
98 Percentile	95.24	852.08	23.93	51.79	1191.28	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 40

**Area: Hingula Area
 Project: Balram OCP
 Monitoring Station: Project Office, Balram OCP**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
15-04-2017	54	328	7.63	<6	744	Sunny
19-04-2017	77	506	5.38	<6	811	Sunny
04-05-2017	54	167	2.07	<6	266	Sunny
18-05-2017	8	418	4.47	<6	673	Sunny & Night Rainfall
09-06-2017	21	224	5.46	20	566	Sunny & Cloudy
21-06-2017	21	185	5.44	<6	399	Cloudy & Rainfall
07-07-2017	39	60	2.69	<6	137	Cloudy & Rainfall
21-07-2017	44	167	1.73	11	376	Cloudy & Evening Rainfall
04-08-2017	8	48	2.45	<6	108	Sunny & Rainfall
22-08-2017	54	114	1.47	<6	234	Sunny & Rainfall
05-09-2017	49	148	10.75	<6	331	Sunny
21-09-2017	20	57	0.76	<6	143	Cloudy
06-10-2017	32	75	2.07	6.87	174	Cloudy
23-10-2017	94	290	1.53	0.55	473	Sunny & Rainfall
03-11-2017	54	148	24.82	1.66	298	Sunny
17-11-2017	18	37	2.21	2.67	48	Night Rainfall
02-12-2017	60	270	0.96	1.57	630	Sunny
16-12-2017	58	101	1.81	5.86	229	Sunny
06-01-2018	128	307	0.65	<6	443	Sunny
20-01-2018	70	399	25.25	<6	522	Sunny
06-02-2018	50	143	6.48	15.51	208	Sunny
21-02-2018	145	572	9.56	13.73	691	Sunny
09-03-2018	131	538	0.73	<6	680	Sunny
24-03-2018	51	271	6.59	11.26	341	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in μg/m³
Maximum	145.00	572.00	25.25	20.00	811.00	
Minimum	8.00	37.00	0.65	0.55	48.00	
Average	55.83	232.21	5.54	8.24	396.88	
95 Percentile	130.55	533.20	22.71	17.76	736.05	
98 Percentile	138.84	557.04	25.06	19.10	758.20	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





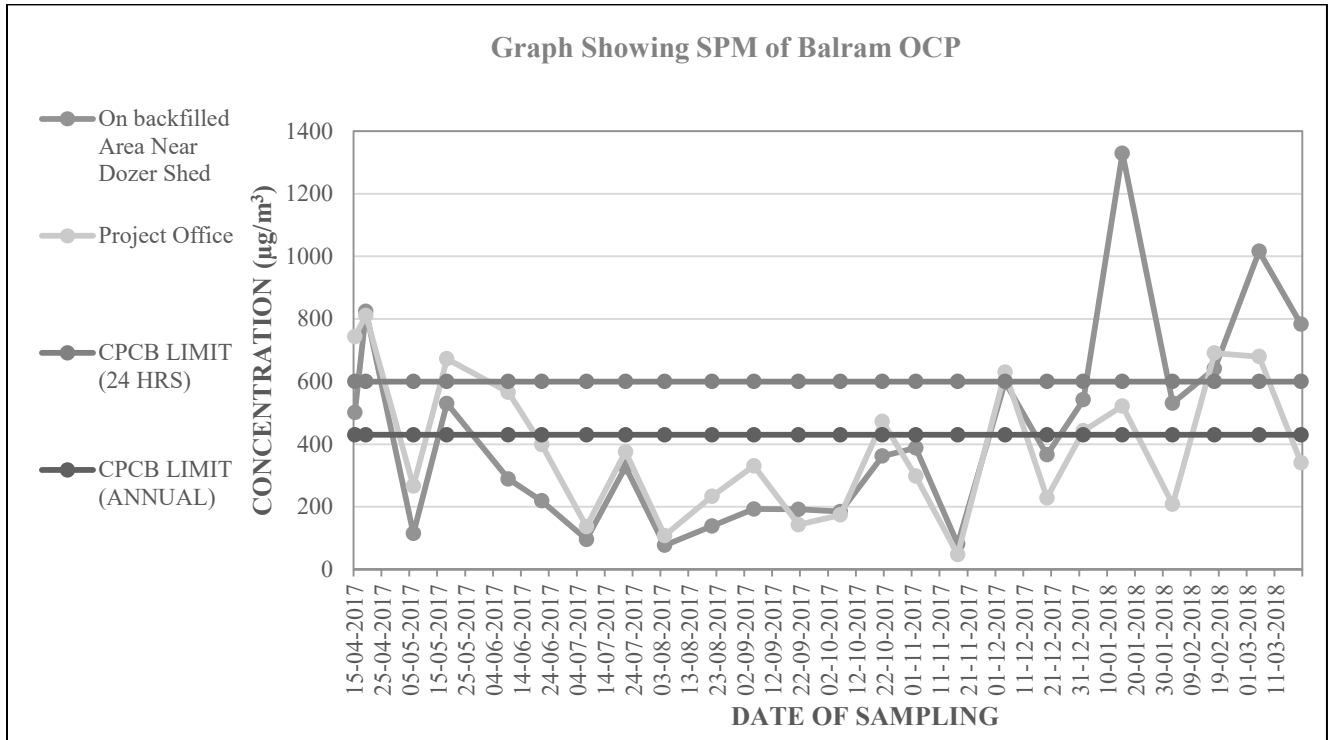


Table: 41

**Area: Hingula Area
 Project: Balram OCP
 Monitoring Station: Village-Natada (NAAQS)**

Date of Sampling	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	Remarks
17-04-2017	68	237	2.13	<6	365	Sunny
18-04-2017	38	143	1.84	<6	253	Sunny
26-04-2017	44	290	2.03	<6	510	Sunny
27-04-2017	38	246	3.09	<6	318	Sunny
02-05-2017	45	364	1.49	<6	366	Sunny
03-05-2017	42	171	1.6	<6	281	Evening Rainfall
08-05-2017	36	181	1.22	<6	415	Sunny
09-05-2017	40	78	2.71	<6	126	Evening Rainfall
16-05-2017	62	211	2.34	12	310	Sunny
17-05-2017	36	57	1.38	12	133	Sunny
23-05-2017	45	142	2.05	10	245	Sunny
24-05-2017	60	75	2.3	12	149	Sunny
01-06-2017	33	100	6.2	<6	958	Sunny & Rainfall
02-06-2017	52	113	4.55	<6	188	Sunny & Rainfall
07-06-2017	26	63	6.12	<6	192	Sunny & Rainfall
08-06-2017	34	80	5.36	<6	161	Sunny
16-06-2017	20	41	4.78	<6	88	Cloudy & Heavy Rainfall
17-06-2017	21	54	5.09	<6	97	Cloudy & Rainfall
23-06-2017	21	44	5.03	<6	64	Cloudy & Rainfall
24-06-2017	17	51	5.78	<6	82	Cloudy & Rainfall
03-07-2017	11	55	1.28	<6	-	Cloudy
04-07-2017	15	48	1.74	<6	-	Cloudy
10-07-2017	23	72	2.23	<6	-	Evening Heavy Rainfall
11-07-2017	14	36	1.98	<6	-	Cloudy & Rainfall
17-07-2017	17	20	1.67	6	-	Cloudy & Night Rainfall
18-07-2017	13	20	2.06	<6	-	Cloudy & Evening Rainfall
24-07-2017	15	16	2.34	<6	-	Cloudy & Night Rainfall
25-07-2017	58	43	2.56	<6	-	Cloudy & Rainfall
01-08-2017	15	22	1.61	10	56	Cloudy & Night Rainfall
02-08-2017	10	22	1.76	<6	36	Evening Rainfall
08-08-2017	15	50	1.24	<6	63	Sunny & Rainfall
09-08-2017	29	86	2.03	<6	107	Cloudy & Night Rainfall
16-08-2017	29	40	1.1	<6	88	Cloudy & Rainfall
17-08-2017	41	47	1.17	<6	101	Night Rainfall
23-08-2017	32	102	2.5	<6	140	Evening Rainfall
24-08-2017	18	77	1.28	<6	98	Afternoon Rainfall
01-09-2017	27	48	15.15	<6	87	Cloudy & Evening Rainfall
02-09-2017	27	50	2.03	<6	66	Cloudy & Night Rainfall
07-09-2017	24	93	1.54	8	147	Cloudy & Evening Rainfall
08-09-2017	23	106	0.59	<6	167	Sunny & Night Rainfall
18-09-2017	47	87	11.35	<6	112	Cloudy & Evening Rainfall
19-09-2017	9	42	2.11	<6	60	Cloudy & Night Rainfall
23-09-2017	27	125	0.97	<6	152	Sunny & Cloudy
24-09-2017	29	104	1.74	9	121	Sunny & Cloudy
03-10-2017	29	148	4.58	1.67	170	Cloudy
04-10-2017	23	49	0.75	2.67	100	Cloudy
10-10-2017	10	24	1.63	1.99	55	Cloudy & sunny
11-10-2017	40	83	0.73	1.35	104	Cloudy Rainfall

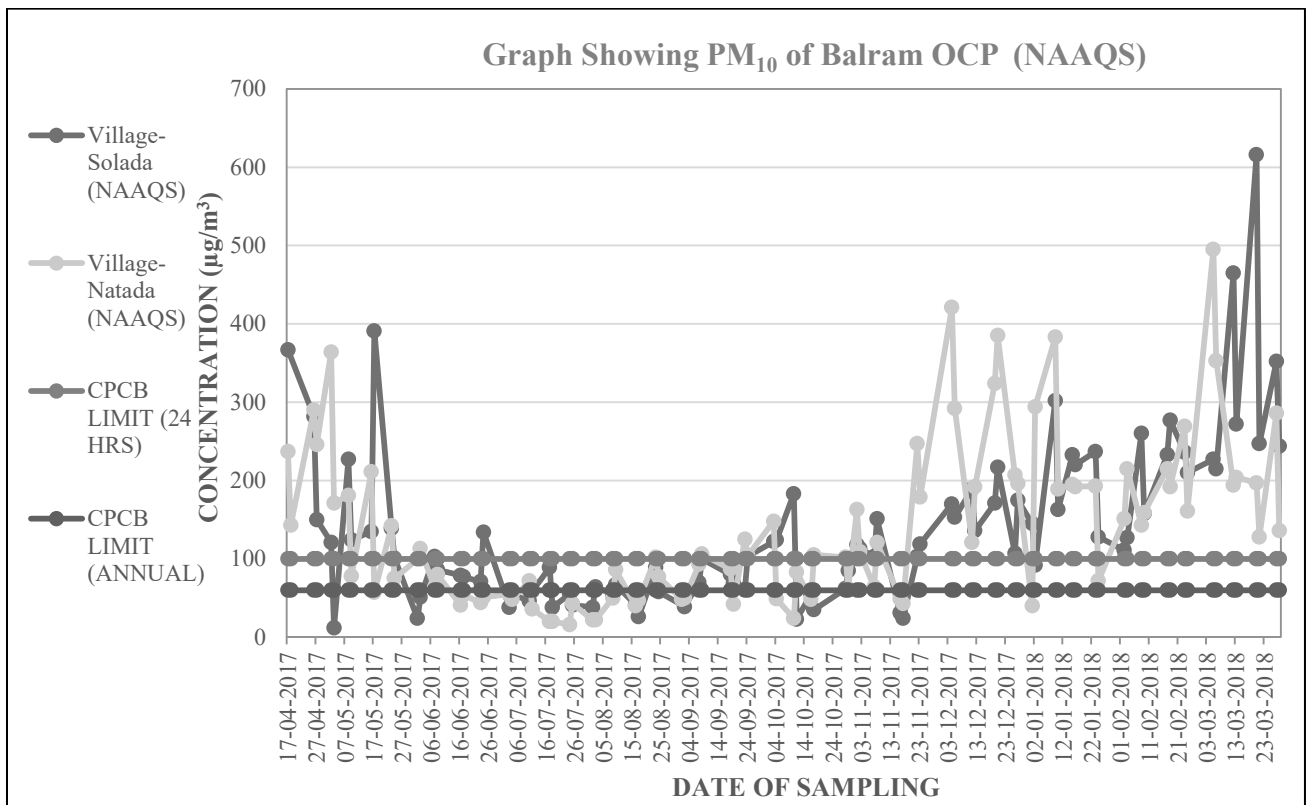
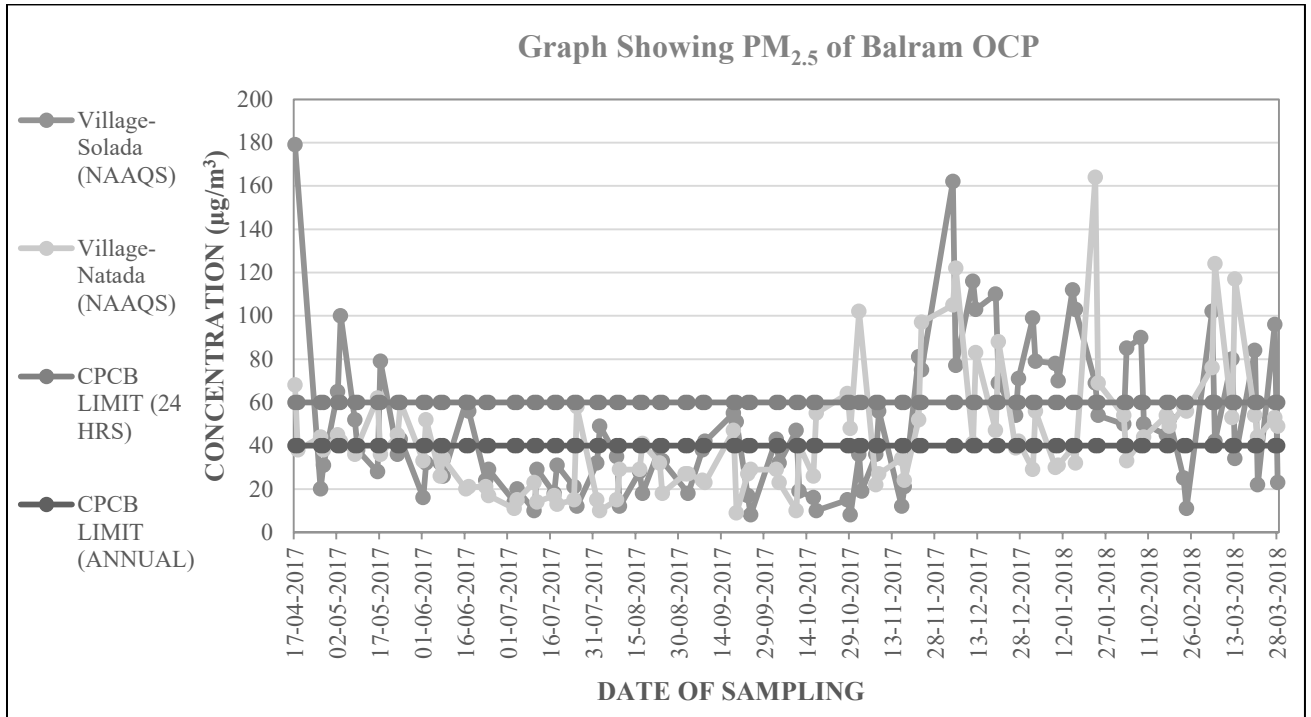
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
16-10-2017	26	48	2.08	1.58	86	Sunny
17-10-2017	55	105	3.54	0.54	160	Sunny
28-10-2017	64	102	3.97	2.72	175	Sunny
29-10-2017	48	62	5.44	1.95	117	Sunny
01-11-2017	102	163	6.34	3.48	331	Sunny
02-11-2017	-	109	6.71	3.27	125	Sunny & PM2.5 Sampler BD
07-11-2017	22	64	6.87	4.82	178	Sunny
08-11-2017	27	121	2.84	1.57	334	Cloudy & Sunny
16-11-2017	34	49	7.27	6.61	126	Rainfall
17-11-2017	24	43	6.94	6.45	97	Night Rainfall
22-11-2017	52	247	12.79	8.91	437	Sunny
23-11-2017	97	179	4.83	4.5	315	Sunny
04-12-2017	105	421	0.41	3.55	689	Sunny
05-12-2017	122	292	0.25	3.44	421	Sunny
11-12-2017	41	121	2.63	16.99	186	Sunny
12-12-2017	83	192	2.18	1.58	298	Sunny
19-12-2017	47	324	10.11	28.58	425	Sunny
20-12-2017	88	385	7.8	0.39	454	Sunny
26-12-2017	39	207	0.96	1.23	354	Sunny
27-12-2017	42	196	2.64	1.69	384	Sunny
01-01-2018	29	40	1.09	<6	60	Sunny
02-01-2018	56	294	0.38	<6	453	Sunny
09-01-2018	30	383	0.32	<6	406	Sunny
10-01-2018	31	189	0.54	8.6	230	Sunny
15-01-2018	39	195	0.23	10.88	343	Sunny
16-01-2018	32	192	7.88	23.15	382	Sunny
23-01-2018	164	193	18.45	8.45	309	Sunny
24-01-2018	69	72	3.23	<6	281	Sunny
02-02-2018	54	151	0.42	8.98	335	Sunny
03-02-2018	33	215	14.07	13.27	380	Sunny
08-02-2018	-	143	19.91	15.64	396	Sunny & PM2.5 Sampler BD
09-02-2018	44	159	11.34	6.46	274	Sunny
17-02-2018	54	215	2.59	<6	496	Sunny
18-02-2018	49	192	12.03	6.73	426	Sunny
23-02-2018	58	269	16.49	15.9	459	Sunny
24-02-2018	56	161	4.6	21.29	368	Sunny
05-03-2018	76	495	0.94	6.47	511	Sunny
06-03-2018	124	353	0.78	9.69	628	Sunny
12-03-2018	53	194	1.26	10.54	345	Sunny
13-03-2018	117	204	2.23	<6	415	Sunny
20-03-2018	54	197	1.39	<6	459	Sunny
21-03-2018	44	128	1.66	6.46	253	Sunny
27-03-2018	53	286	2.53	29.81	409	Sunny
28-03-2018	49	136	3.24	14.73	265	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	164.00	495.00	19.91	29.81	958.00	
Minimum	9.00	16.00	0.23	0.39	36.00	
Average	43.71	140.67	3.95	8.32	260.79	
95 Percentile	103.65	357.95	13.37	22.41	507.90	
98 Percentile	122.44	391.48	16.84	28.63	648.74	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 42

**Area: Hingula Area
 Project: Balram OCP
 Monitoring Station: Village-Solada (NAAQS)**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
17-04-2017	179	367	4.22	21	719	Sunny
18-04-2017						Sunny & Power failure
26-04-2017	20	282	6.17	<6	556	Sunny
27-04-2017	31	150	2.19	9	346	Sunny
02-05-2017	65	121	2.68	<6	329	Sunny
03-05-2017	100	12	1.85	<6	32	Evening Rainfall
08-05-2017	52	227	0.79	9	339	Sunny
09-05-2017	38	124	0.89	<6	245	Evening Rainfall
16-05-2017	28	135	2.39	<6	247	Sunny
17-05-2017	79	391	2.57	<6	474	Sunny
23-05-2017	36	139	2.21	8	362	Sunny
24-05-2017	43	101	2.59	<6	304	Sunny
01-06-2017	16	24	5.46	<6	37	Sunny & Rainfall
02-06-2017	32	51	5.75	<6	59	Sunny & Rainfall
07-06-2017	32	103	6.23	6	189	Sunny & Cloudy
08-06-2017	26	86	4	<6	152	Sunny
16-06-2017	60	79	4.29	<6	141	Cloudy & Heavy Rainfall
17-06-2017	56	77	5.29	<6	152	Sunny
23-06-2017	24	71	5.79	<6	96	Cloudy & Rainfall
24-06-2017	29	134	4.04	<6	164	Cloudy & Rainfall
03-07-2017	14	38	2.33	<6	-	Cloudy
04-07-2017	20	55	1.22	<6	-	Cloudy
10-07-2017	10	46	1.85	<6	-	Evening Heavy Rainfall
11-07-2017	29	59	6.21	7	-	Cloudy & Rainfall
17-07-2017	18	89	3.28	<6	-	Cloudy & Night Rainfall
18-07-2017	31	38	4.18	<6	-	Cloudy & Evening Rainfall
24-07-2017	21	55	1.13	<6	-	Cloudy & Night Rainfall
25-07-2017	12	41	4.85	<6	-	Cloudy & Rainfall
01-08-2017	32	38	1.09	<6	51	Cloudy & Night Rainfall
02-08-2017	49	64	1.15	<6	88	Evening Rainfall
08-08-2017	35	55	1.6	<6	107	Sunny & Rainfall
09-08-2017	12	67	1.19	<6	89	Cloudy & Night Rainfall
16-08-2017	28	41	1.06	<6	88	Cloudy & Rainfall
17-08-2017	18	26	1.65	<6	37	Night Rainfall
23-08-2017	39	89	1.97	10	177	Evening Rainfall
24-08-2017	33	58	1.45	7	117	Afternoon Rainfall
01-09-2017						No Electricity
02-09-2017	18	39	0.92	<6	56	Cloudy & Night Rainfall
07-09-2017	38	70	1.09	<6	94	Cloudy & Evening Rainfall
08-09-2017	42	100	0.53	<6	130	Sunny & Night Rainfall
18-09-2017	55	80	1.63	9	103	Cloudy & Evening Rainfall
19-09-2017	51	69	1.51	<6	101	Cloudy & Night Rainfall
23-09-2017	17	61	0.8	<6	83	Sunny & Cloudy Rainfall
24-09-2017	8	103	1.05	<6	195	Sunny & Cloudy
03-10-2017	43	122	5.74	2.63	151	Cloudy
04-10-2017	32	124	0.71	4.55	255	Cloudy
10-10-2017	47	183	0.39	1.27	208	Sunny & Cloudy

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
11-10-2017	19	23	1.24	2.79	48	Cloudy Rainfall
16-10-2017	16	55	3.9	13.19	100	Sunny
17-10-2017	10	35	7.24	0.83	76	Sunny
28-10-2017	15	62	4.47	0.96	128	Sunny
29-10-2017	8	85	4.16	1.74	119	Sunny
01-11-2017	36	118	1.36	4.53	204	Sunny
02-11-2017	19	113	1.56	5.56	283	Sunny
07-11-2017	36	103	2.6	3.12	322	Sunny
08-11-2017	56	151	5.39	4.42	214	Cloudy & Sunny
16-11-2017	12	31	0.44	1.06	102	Rainfall
17-11-2017	21	24	2.58	7.65	37	Night Rainfall
22-11-2017	81	103	14.23	6.28	147	Sunny
23-11-2017	75	119	3.75	8.34	219	Sunny
04-12-2017	162	170	21.66	6.55	216	Sunny
05-12-2017	77	153	1.11	0.92	250	Sunny
11-12-2017	116	189	3.32	8.44	427	Sunny
12-12-2017	103	136	2.16	1.87	178	Sunny
19-12-2017	110	171	3.61	8.46	334	Sunny
20-12-2017	69	217	9.3	8.79	291	Sunny
26-12-2017	54	107	2.63	9.66	160	Sunny
27-12-2017	71	175	3.33	5.03	242	Sunny
01-01-2018	99	145	1.01	8.4	170	Sunny
02-01-2018	79	92	0.56	<6	146	Sunny
09-01-2018	78	302	8.15	14.02	487	Sunny
10-01-2018	70	163	1.58	<6	216	Sunny
15-01-2018	112	233	21.54	12.77	427	Sunny
16-01-2018	103	220	21.7	19.05	354	Sunny
23-01-2018	69	237	31.23	9.98	481	Sunny
24-01-2018	54	128	9.85	<6	411	Sunny
02-02-2018	50	111	20.48	<6	240	Sunny
03-02-2018	85	127	10.7	15.7	194	Sunny
08-02-2018	90	260	12.12	21.12	681	Sunny
09-02-2018	50	158	4.27	13.73	279	Sunny
17-02-2018	45	233	19.76	20.62	370	Sunny
18-02-2018	52	277	19.84	<6	332	Sunny
23-02-2018	25	236	39	9.83	391	Sunny
24-02-2018	11	210	9.32	9.63	379	Sunny
05-03-2018	102	227	0.51	8.27	392	Sunny
06-03-2018	42	215	0.81	7.75	365	Sunny
12-03-2018	80	465	2.39	10.85	505	Sunny
13-03-2018	34	272	0.45	14.93	431	Sunny
20-03-2018	84	616	0.5	<6	720	Sunny
21-03-2018	22	247	0.45	16.27	449	Sunny
27-03-2018	96	352	1.58	<6	585	Sunny
28-03-2018	23	244	8.24	<6	359	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	179.00	616.00	39.00	21.12	720.00	
Minimum	8.00	12.00	0.39	0.83	32.00	
Average	49.10	139.93	5.18	8.52	250.41	
95 Percentile	106.85	329.50	21.06	19.99	553.45	
98 Percentile	126.12	407.28	23.80	21.00	695.44	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	



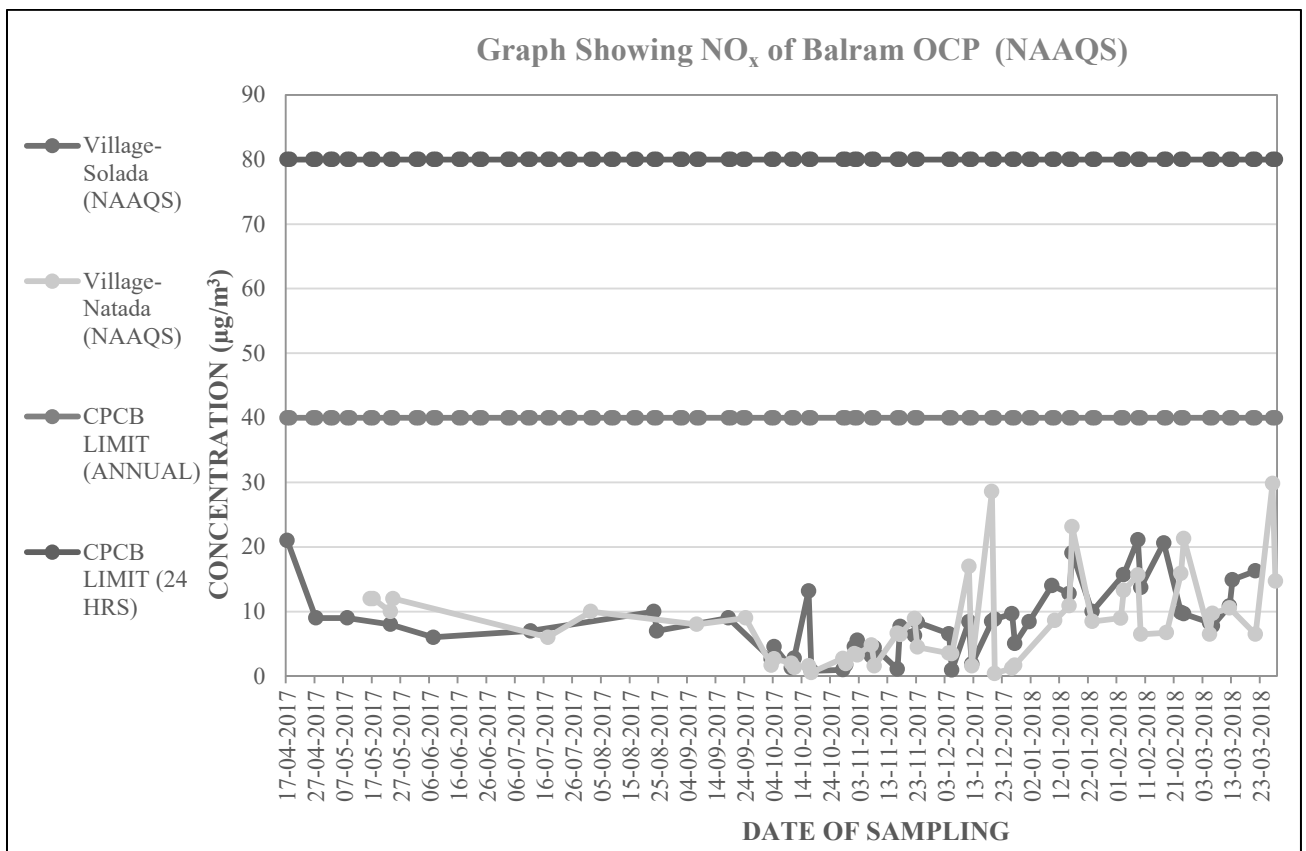
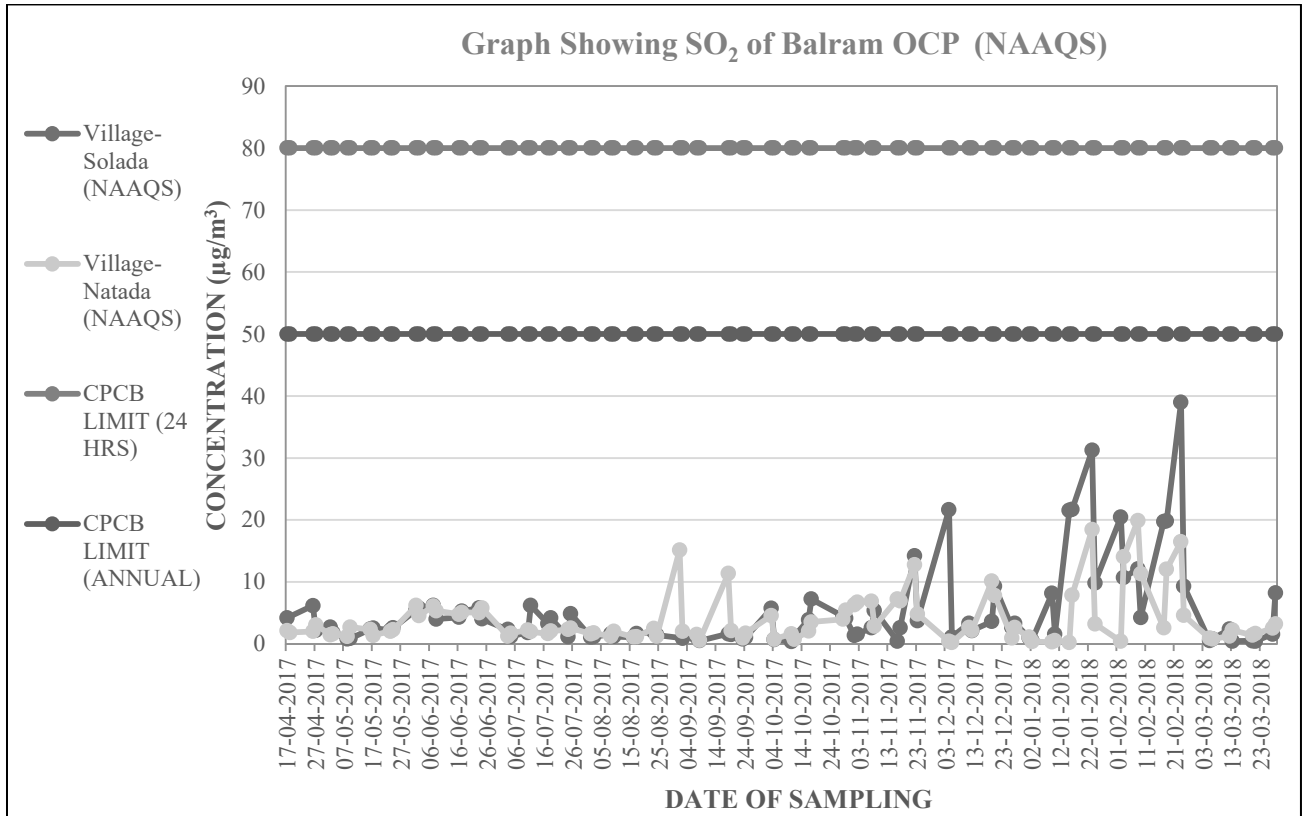


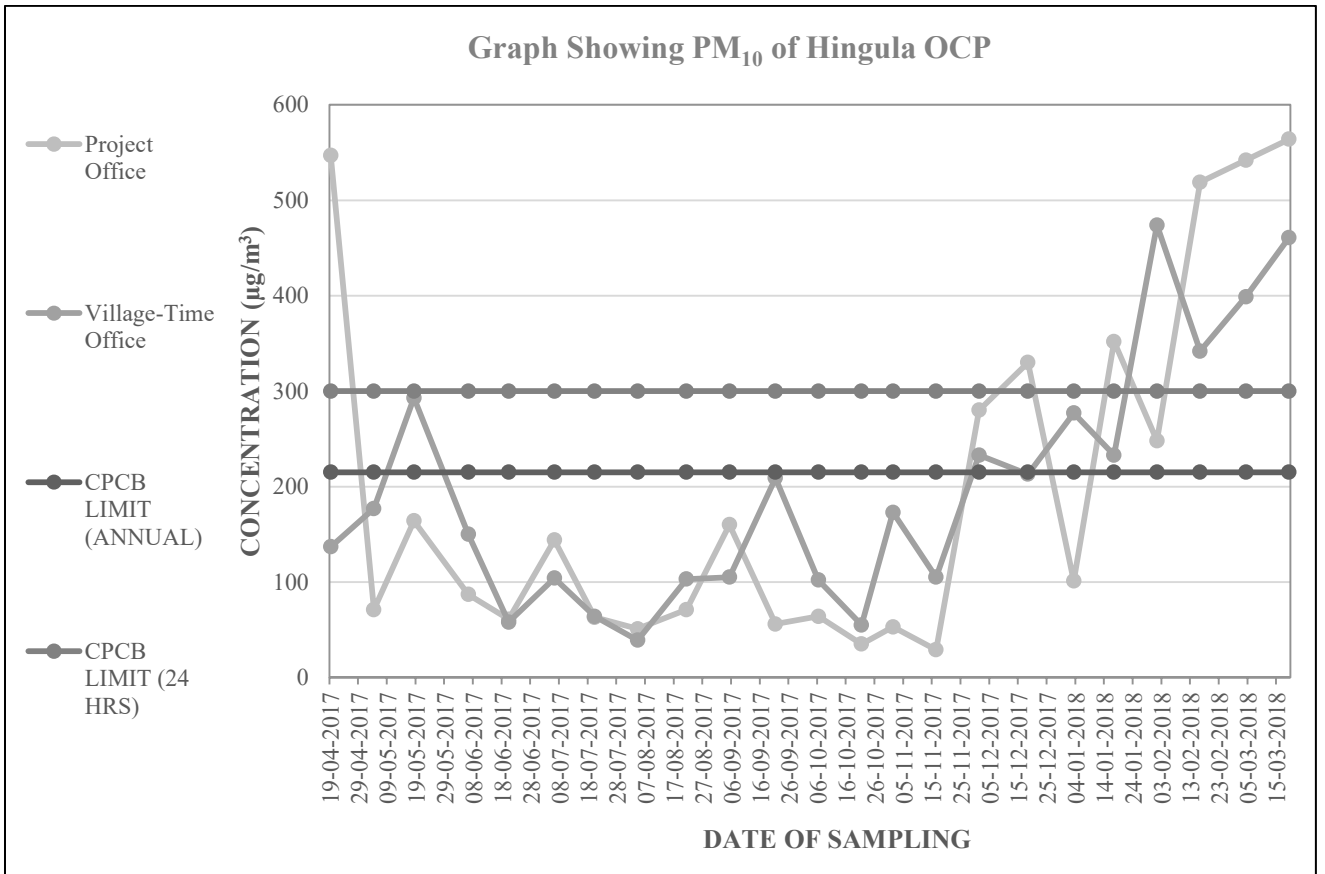
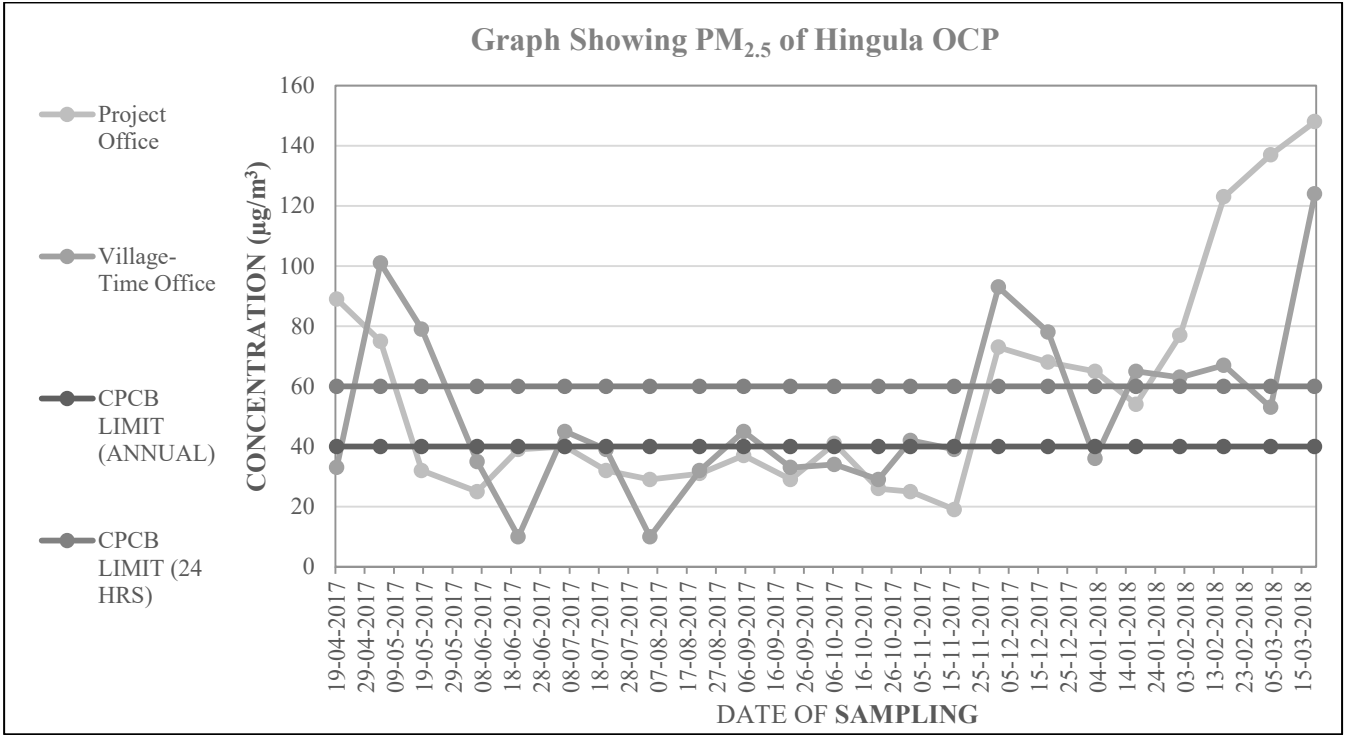
Table: 43

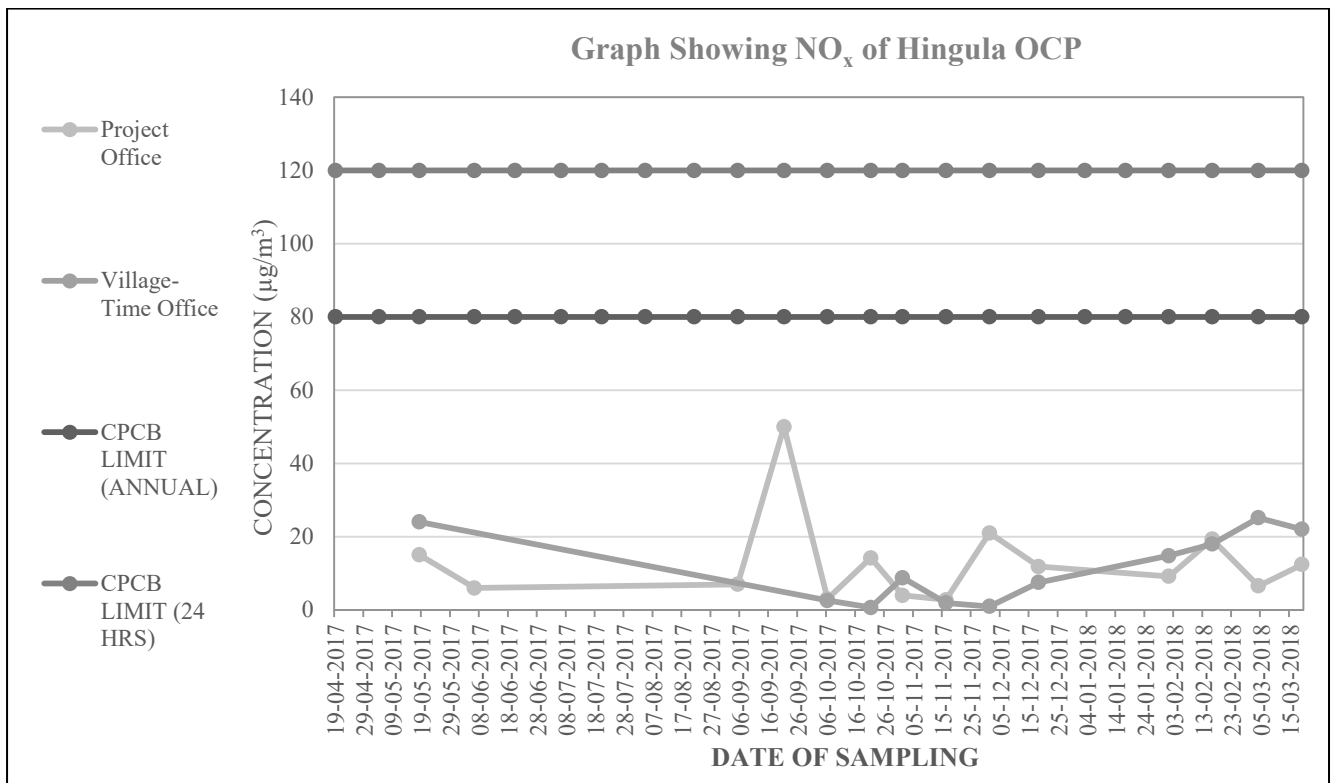
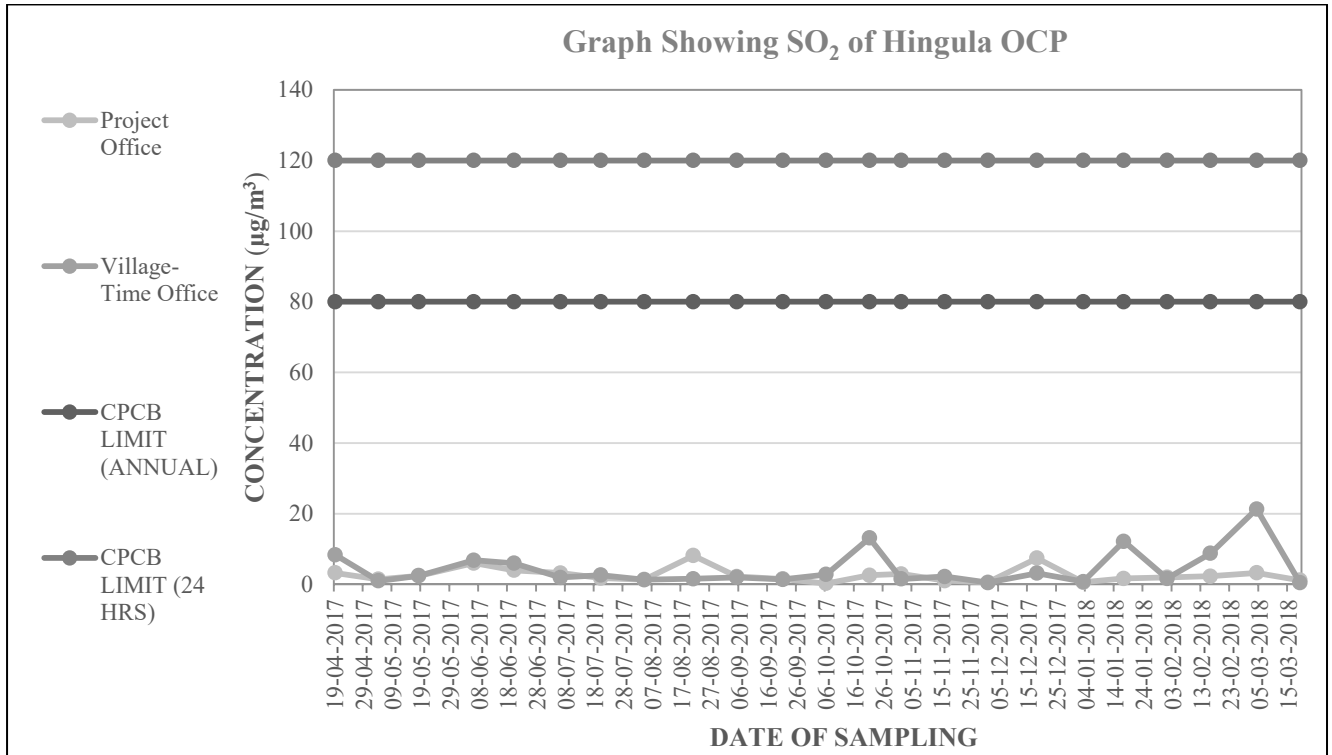
**Area: Hingula Area
Project: Hingula OCP
Monitoring Station: Near Project Office**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
19/04/2017	89	547	3.21	<6	777	Sunny
04/05/2017	75	71	1.42	<6	169	Sunny
18/05/2017	32	164	2.38	15	570	Sunny & Night Rainfall
06/06/2017	25	87	5.96	6	221	Sunny & Night Rainfall
20/06/2017	39	61	3.92	<6	61	Cloudy & Heavy Rainfall
06/07/2017	40	144	3.15	<6	302	Cloudy
20/07/2017	32	63	1.74	<6	89	Cloudy & Evening Rainfall
04/08/2017	29	51	1.33	<6	85	Sunny & Rainfall
21/08/2017	31	71	8.09	<6	122	Sunny & Rainfall
05/09/2017	37	160	2.16	7	362	Sunny
21/09/2017	29	56	1.51	50	72	Cloudy
06/10/2017	41	64	0.23	2.99	175	Cloudy
21/10/2017	26	35	2.53	14.2	117	Sunny & Cloudy
01/11/2017	25	53	2.89	3.95	161	Sunny
16/11/2017	19	29	1.01	2.74	59	Rainfall
01/12/2017	73	280	0.52	21.01	570	Sunny
18/12/2017	68	330	7.39	11.83	691	Sunny
03/01/2018	65	101	0.52	<6	199	Sunny
17/01/2018	54	352	1.64	<6	669	Sunny
01/02/2018	77	248	1.93	9.16	747	Sunny
16/02/2018	123	519	2.28	19.3	736	Sunny
04/03/2018	137	542	3.23	6.53	807	Sunny
19/03/2018	148	564	1.13	12.41	949	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	148.00	564.00	8.09	50.00	949.00	
Minimum	19.00	29.00	0.23	2.74	59.00	
Average	57.13	199.65	2.62	13.01	378.70	
95 Percentile	135.60	546.50	7.25	31.16	804.00	
98 Percentile	143.16	556.52	7.78	42.46	886.52	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 44
Area: Hingula Area
Project: Hingula OCP
Monitoring Station: Village Time Office

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
19-04-2017	33	137	8.34	<6	352	Sunny
04-05-2017	101	177	0.95	<6	233	Sunny
18-05-2017	79	293	2.4	24	684	Sunny & Night Rainfall
06-06-2017	35	150	6.78	<6	187	Sunny & Rainfall
20-06-2017	10	58	5.94	<6	58	Cloudy & Heavy Rainfall
06-07-2017	45	104	1.91	<6	220	Cloudy
20-07-2017	39	64	2.56	<6	137	Cloudy & Evening Rainfall
04-08-2017	10	39	1.26	<6	55	Sunny & Rainfall
21-08-2017	32	103	1.52	<6	157	Sunny & Rainfall
05-09-2017	45	105	1.95	<6	210	Sunny
21-09-2017	33	209	1.34	<6	277	Cloudy
06-10-2017	34	102	2.75	2.58	195	Cloudy
21-10-2017	29	55	13.11	0.67	102	Sunny & Cloudy
01-11-2017	42	173	1.5	8.77	425	Sunny
16-11-2017	39	105	2.16	1.91	121	Rainfall
01-12-2017	93	233	0.44	0.94	385	Sunny
18-12-2017	78	213	3.14	7.5	358	Sunny
03-01-2018	36	277	0.72	<6	375	Sunny
17-01-2018	65	233	12.13	<6	447	Sunny
01-02-2018	63	474	1.61	14.82	625	Sunny
16-02-2018	67	342	8.73	18.01	630	Sunny
04-03-2018	53	399	21.29	25.15	656	Sunny
19-03-2018	124	461	0.45	22.02	746	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	124.00	474.00	21.29	25.15	746.00	
Minimum	10.00	39.00	0.44	0.67	55.00	
Average	51.52	195.91	4.48	11.49	331.96	
95 Percentile	100.20	454.80	13.01	24.58	681.20	
98 Percentile	113.88	468.28	17.69	24.92	718.72	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





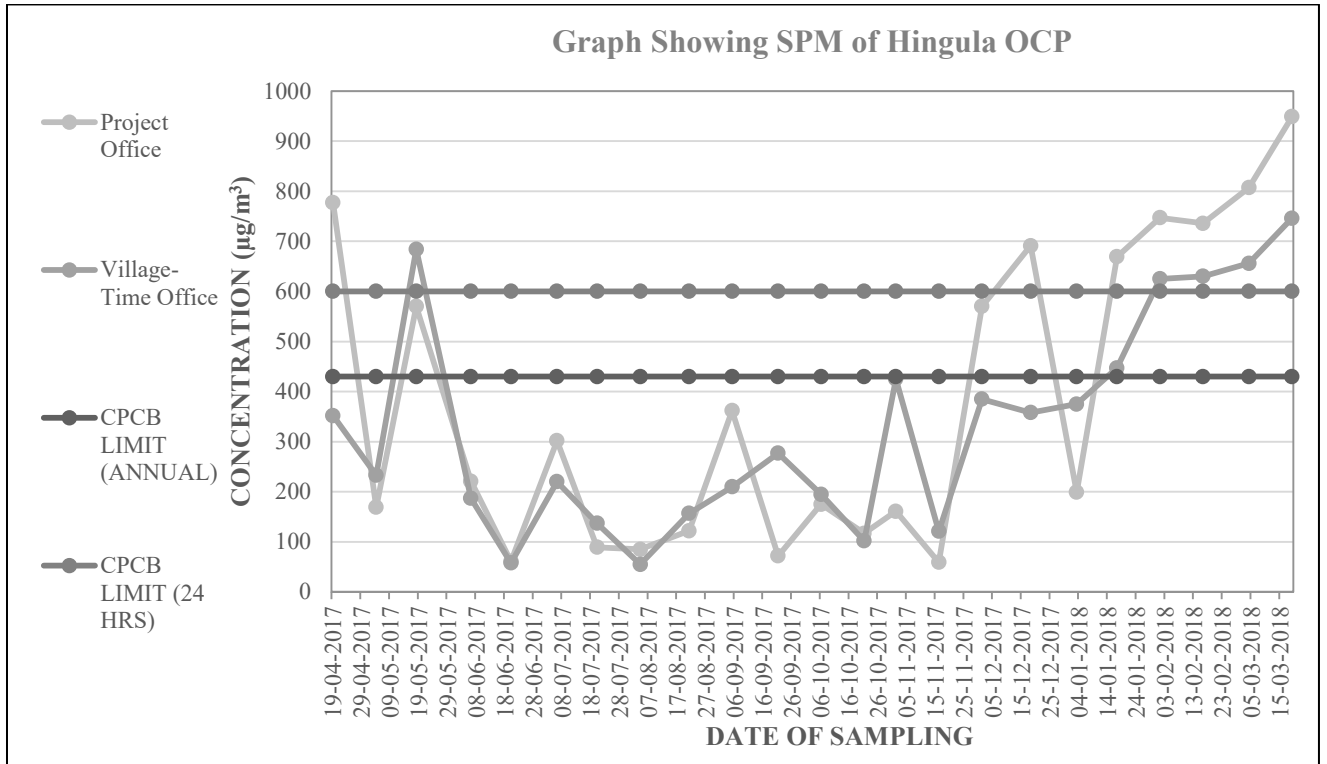


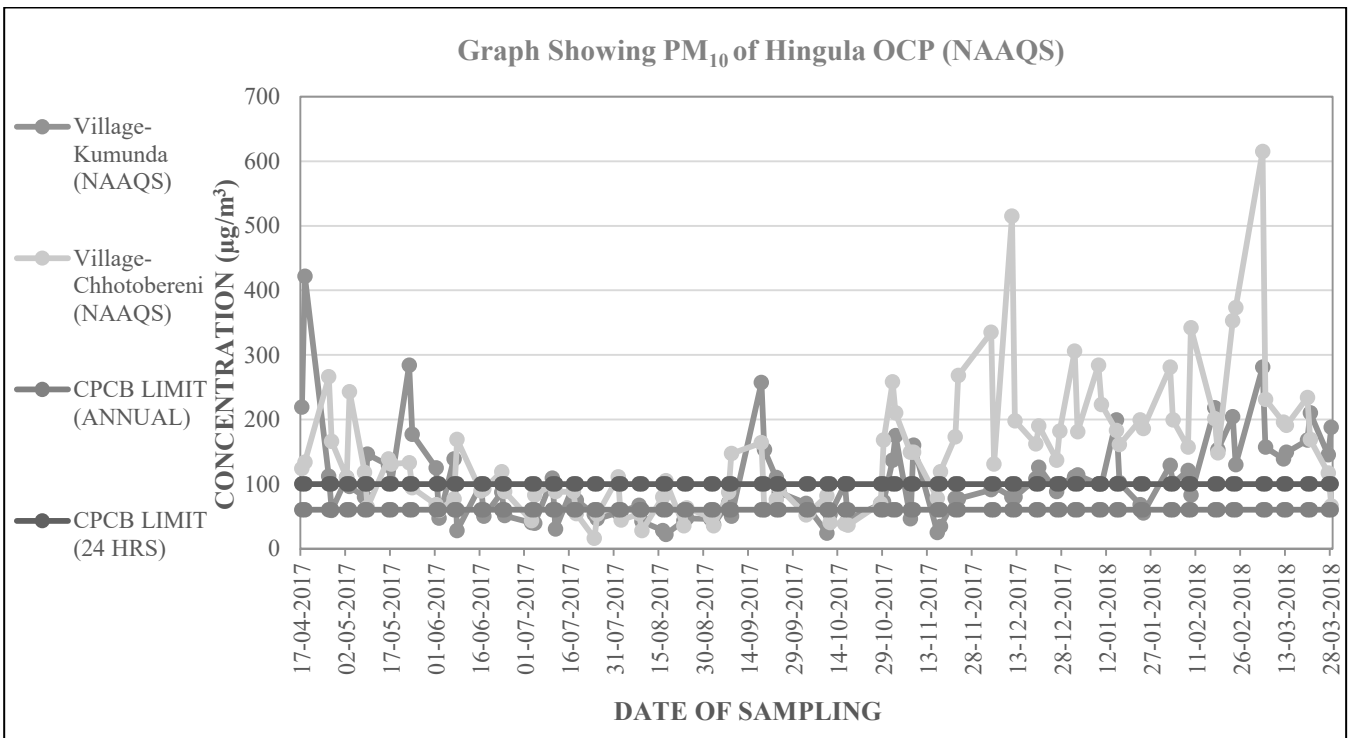
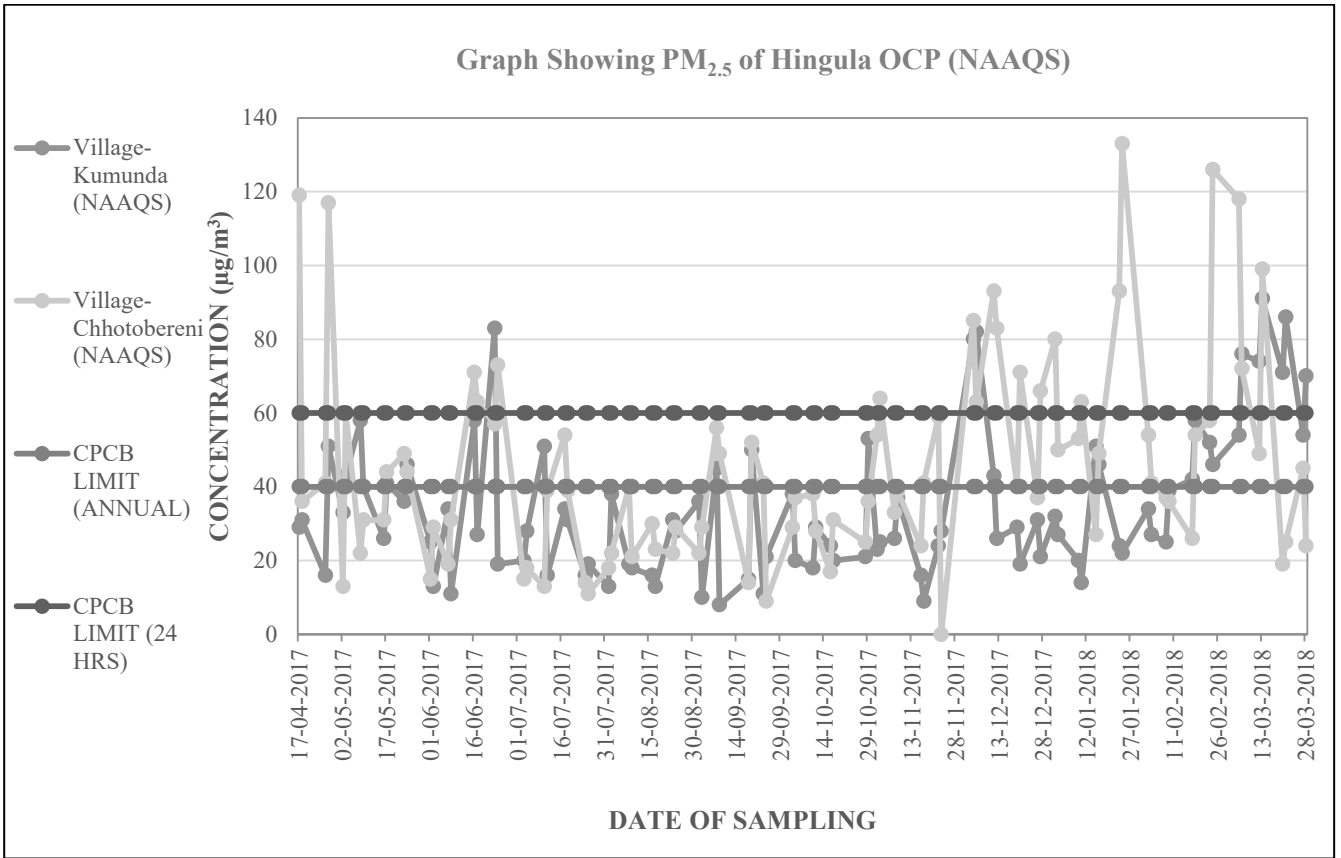
Table:45

**Area: Hingula Area
 Project: Hingula OCP
 Monitoring Station: Kumunda (NAAQS)**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
17/04/2017	29	219	4.19	<6	346	Sunny
18/04/2017	31	422	5.213	<6	606	Sunny
26/04/2017	16	112	3.49	<6	273	Sunny
27/04/2017	51	59	7.17	7	116	Sunny
02/05/2017	33	110	1.6	<6	267	Sunny
03/05/2017	43	96	2.72	<6	136	Evening Rainfall
08/05/2017	58	80	1.89	<6	190	Sunny
09/05/2017	40	146	1.39	<6	284	Evening Rainfall
16/05/2017	26	129	3.63	19	242	Sunny
17/05/2017	41	101	2.26	19	185	Sunny
23/05/2017	36	284	2.41	25	532	Sunny
24/05/2017	46	177	2.18	22	368	Sunny
01/06/2017	25	125	3.82	15	200	Sunny & Rainfall
02/06/2017	13	47	8.27	<6	71	Sunny & Rainfall
07/06/2017	34	139	4.67	7	275	Sunny & Rainfall
08/06/2017	11	28	3.98	<6	52	Sunny
16/06/2017	58	99	5.83	<6	419	Cloudy & Heavy Rainfall
17/06/2017	27	50	3.87	<6	87	Sunny
23/06/2017	83	87	4.57	<6	135	Cloudy & Rainfall
24/06/2017	19	51	5.02	<6	103	Cloudy & Rainfall
03/07/2017	20	40	1.65	<6		Cloudy
04/07/2017	28	39	1.1	<6		Cloudy
10/07/2017	51	109	1.23	<6		Evening Heavy Rainfall
11/07/2017	16	30	1.1	<6		Cloudy & Rainfall
17/07/2017	34	97	2.3	7		Cloudy & Night Rainfall
18/07/2017	31	75	1.171	<6		Cloudy & Evening Rainfall
24/07/2017	16	53	1.24	<6		Cloudy & Night Rainfall
25/07/2017	19	46	2.16	<6		Cloudy & Rainfall
01/08/2017	13	56	1.5	10.51	139	Cloudy & Night Rainfall
02/08/2017	38	57	1.06	<6	65	Evening Rainfall
08/08/2017	19	67	1.56	<6	69	Sunny & Rainfall
09/08/2017	18	42	6.08	<6	57	Cloudy & Night Rainfall
16/08/2017	16	28	1.06	<6	58	Cloudy & Rainfall
17/08/2017	13	22	8.79	<6	29	Night Rainfall
23/08/2017	31	43	1.11	<6	160	Evening Rainfall
24/08/2017	28	47	1.14	<6	108	Afternoon Rainfall
01/09/2017	36	46	0.7	<6	56	Cloudy & Evening Rainfall
02/09/2017	10	37	1.57	<6	52	Cloudy & Night Rainfall
07/09/2017	45	71	1.77	11	160	Cloudy & Evening Rainfall
08/09/2017	8	50	1.3	<6	113	Sunny & Night Rainfall
18/09/2017	15	257	0.89	<6	292	Cloudy & Evening Rainfall
19/09/2017	50	153	9.26	<6	168	Cloudy & Night Rainfall
23/09/2017	11	110	0.85	<6	144	Sunny & Cloudy Rainfall
24/09/2017	21	87	0.68	<6	102	Sunny & Cloudy
03/10/2017	38	70	3.89	0.94	87	Cloudy
04/10/2017	20	61	2.77	3.18	77	Cloudy
10/10/2017	18	24	2.93	3.76	58	Sunny & Cloudy
11/10/2017	29	53	0.46	3.08	94	Cloudy Rainfall

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
16/10/2017	24	100	3.46	0.85	119	Sunny
17/10/2017	20	45	7.66	7.92	87	Sunny
28/10/2017	21	69	7.39	1.51	92	Sunny
29/10/2017	53	73	1.26	1.17	124	Sunny
01/11/2017	23	137	0.76	1.14	168	Sunny
02/11/2017	25	175	0.9	0.7	183	Sunny
07/11/2017	26	46	3.22	2.59	57	Sunny
08/11/2017	37	160	1.37	3.29	250	Cloudy & Sunny
16/11/2017	16	25	1.77	3	57	Rainfall
17/11/2017	9	34	0.55	2.52	46	Night Rainfall
22/11/2017	24	78	2.21	3.34	97	Sunny
23/11/2017	28	77	2.77	2.2	140	Sunny
04/12/2017	80	91	0.49	1.25	141	Sunny
05/12/2017	82	96	3.33	0.73	169	Sunny
11/12/2017	43	80	2.53	6.3	138	Sunny
12/12/2017	26	80	0.42	3.16	156	Sunny
19/12/2017	29	108	2.73	4.2	210	Sunny
20/12/2017	19	126	0.34	4.41	157	Sunny
26/12/2017	31	88	2.38	1.11	138	Sunny
27/12/2017	21	100	3.31	0.72	175	Sunny
01/01/2018	32	111	0.81	10.58	129	Sunny
02/01/2018	27	114	0.62	<6	160	Sunny
09/01/2018	20	100	0.35	<6	122	Sunny
10/01/2018	14	100	0.57	<6	166	Sunny
15/01/2018	51	199	15.33	13.56	346	Sunny
16/01/2018	46	102	0.47	<6	160	Sunny
23/01/2018	24	68	45.12	11.73	126	Sunny
24/01/2018	22	55	8.79	11.92	93	Sunny
02/02/2018	34	129	5.97	6.46	209	Sunny
03/02/2018	27	101	0.69	33.57	172	Sunny
08/02/2018	25	121	1.01	<6	214	Sunny
09/02/2018	39	83	1.82	9.99	179	Sunny
17/02/2018	42	218	11.91	6.15	446	Sunny
18/02/2018	58	153	1.05	<6	238	Sunny
23/02/2018	52	204	26.7	9.68	429	Sunny
24/02/2018	46	130	9.71	60	160	Sunny
05/03/2018	54	281	1.06	1.3	491	Sunny
06/03/2018	76	157	0.9	7.52	340	Sunny
12/03/2018	74	139	0.54	<6	252	Sunny
13/03/2018	91	149	1	<6	207	Sunny
20/03/2018	71	168	4.09	10.13	544	Sunny
21/03/2018	86	210	1.57	16.92	410	Sunny
27/03/2018	54	145	1.36	19.53	261	Sunny
28/03/2018	70	188	2.9	7.82	351	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	91.00	422.00	45.12	60.00	606.00	
Minimum	8.00	22.00	0.34	0.70	29.00	
Average	34.61	104.83	3.62	8.85	189.10	
95 Percentile	77.80	218.45	9.46	23.65	443.45	
98 Percentile	83.54	281.54	17.38	34.10	536.08	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

**Area: Hingula Area
Project: Hingula OCP
Monitoring Station: Chhotobereni (NAAQS)**



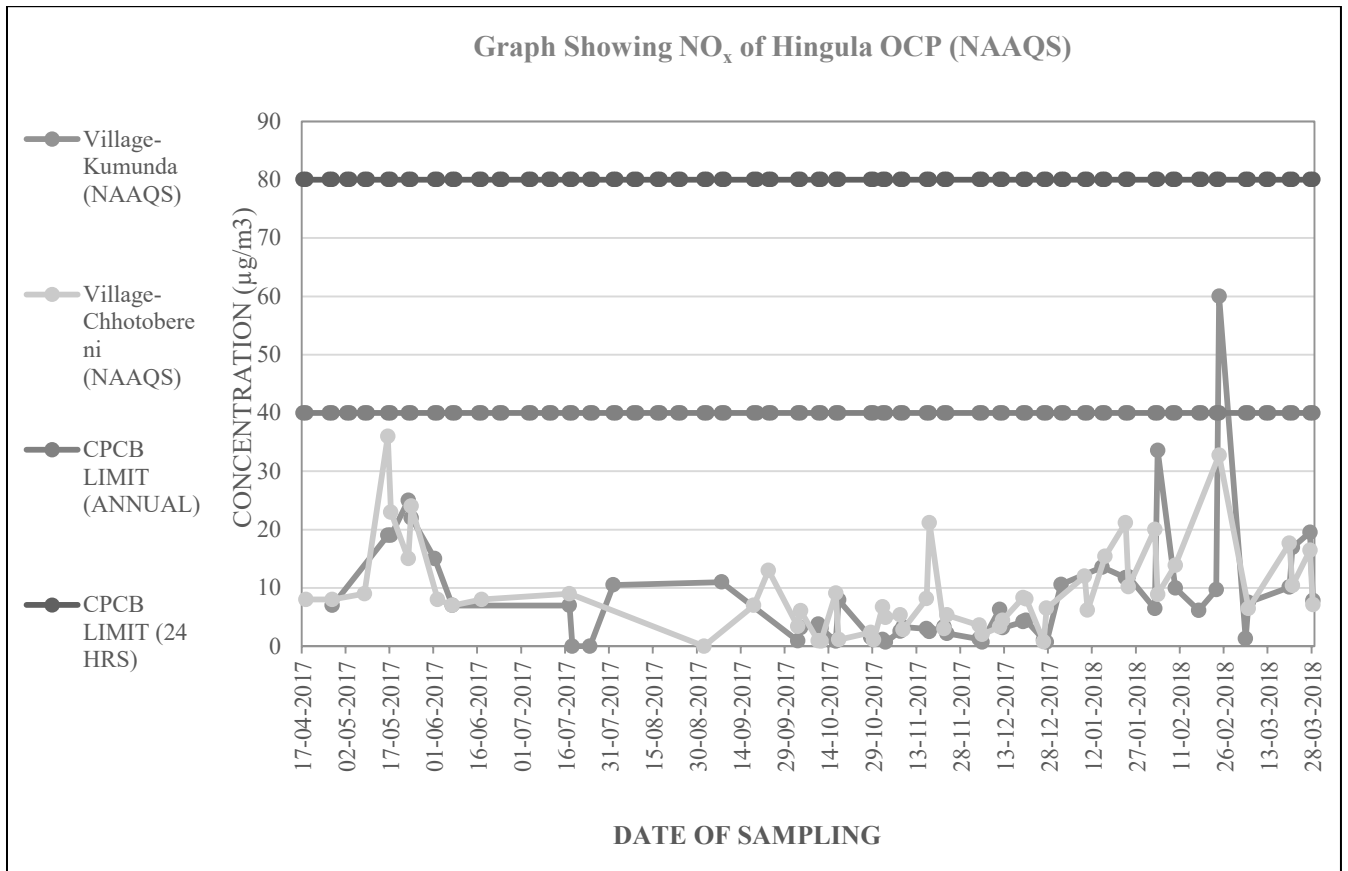
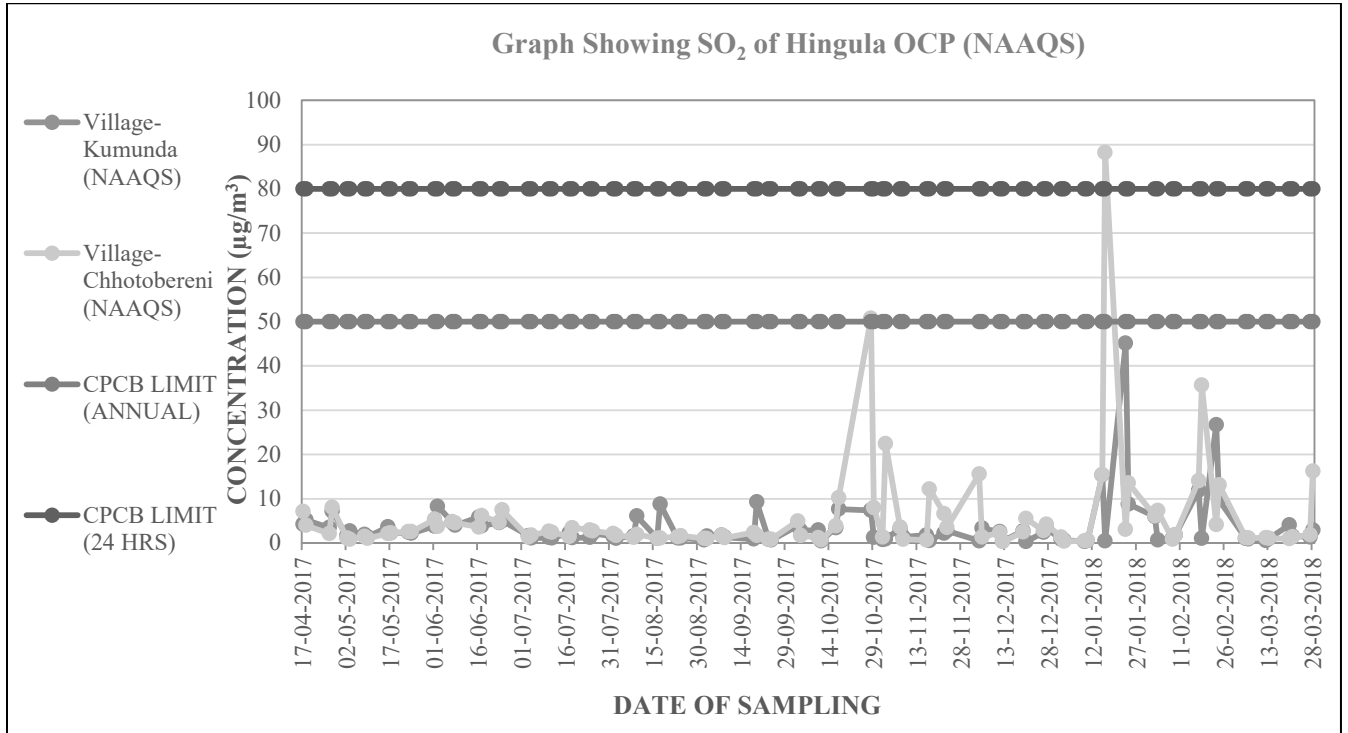


Table: 46

Area: Talcher
Project: Talcher Colliery
Monitoring Station: GM Office

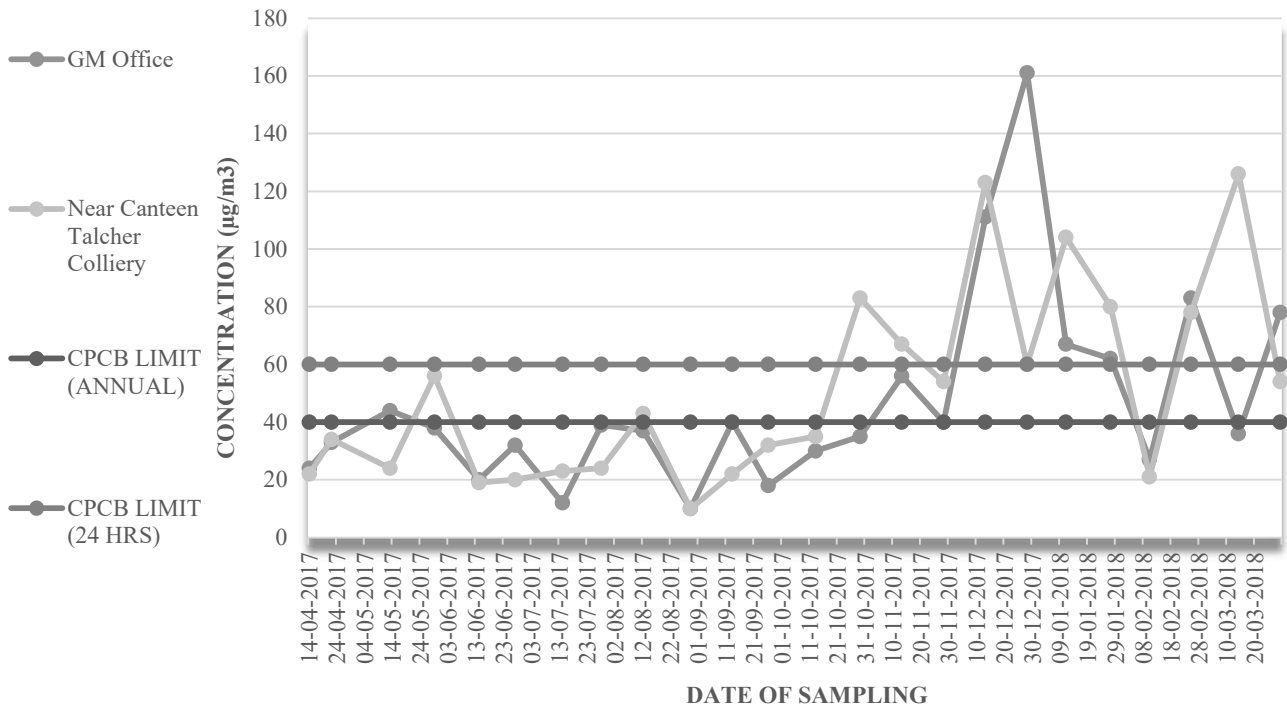
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14/04/2017	24	102	4.11	<6	243	Sunny
22/04/2017	33	176	3.71	<6	255	Sunny
13/05/2017	44	97	1.21	<6	204	Sunny & Evening Rainfall
29/05/2017	38	151	2.4	13	201	Sunny
14/06/2017	20	67	5.19	<6	154	Sunny & Evening Rainfall
27/06/2017	32	50	3.81	<6	141	Cloudy & Rainfall
14/07/2017	12	69	1.35	7	129	Evening & Night Rainfall
28/07/2017	39	45	3.99	<6	68	Cloudy
12/08/2017	37	56	1.48	<6	106	Sunny & Night Rainfall
29/08/2017	10	20	2.34	<6	48	Cloudy & Rainfall
13/09/2017	40	65	3.27	<6	113	Cloudy & Evening Rainfall
26/09/2017	18	304	0.6	<6	344	Sunny
13/10/2017	30	89	1.3	4.05	110	Cloudy & Evening Rainfall
29/10/2017	35	142	26.85	8.7	216	Sunny
13/11/2017	56	134	2.55	44.8	506	Sunny
28/11/2017	40	352	3.29	5.23	566	Cloudy & Sunny
13/12/2017	111	207	1.54	3.54	333	Sunny
28/12/2017	161	350	2.56	9.07	441	Sunny
11/01/2018	67	255	0.16	27.29	335	Sunny
27/01/2018	62	247	2.73	<6	478	Sunny
10/02/2018	27	160	22.82	10.07	260	Sunny
25/02/2018	83	315	3.8	<6	572	Sunny
14/03/2018	36	305	0.66	<6	509	Sunny
29/03/2018	78	166	12.93	31.54	371	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	161.00	352.00	26.85	44.80	572.00	
Minimum	10.00	20.00	0.16	3.54	48.00	
Average	47.21	163.50	4.78	14.94	279.29	
95 Percentile	106.80	344.75	21.34	38.17	557.45	
98 Percentile	138.00	351.08	25.00	42.15	569.24	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 47

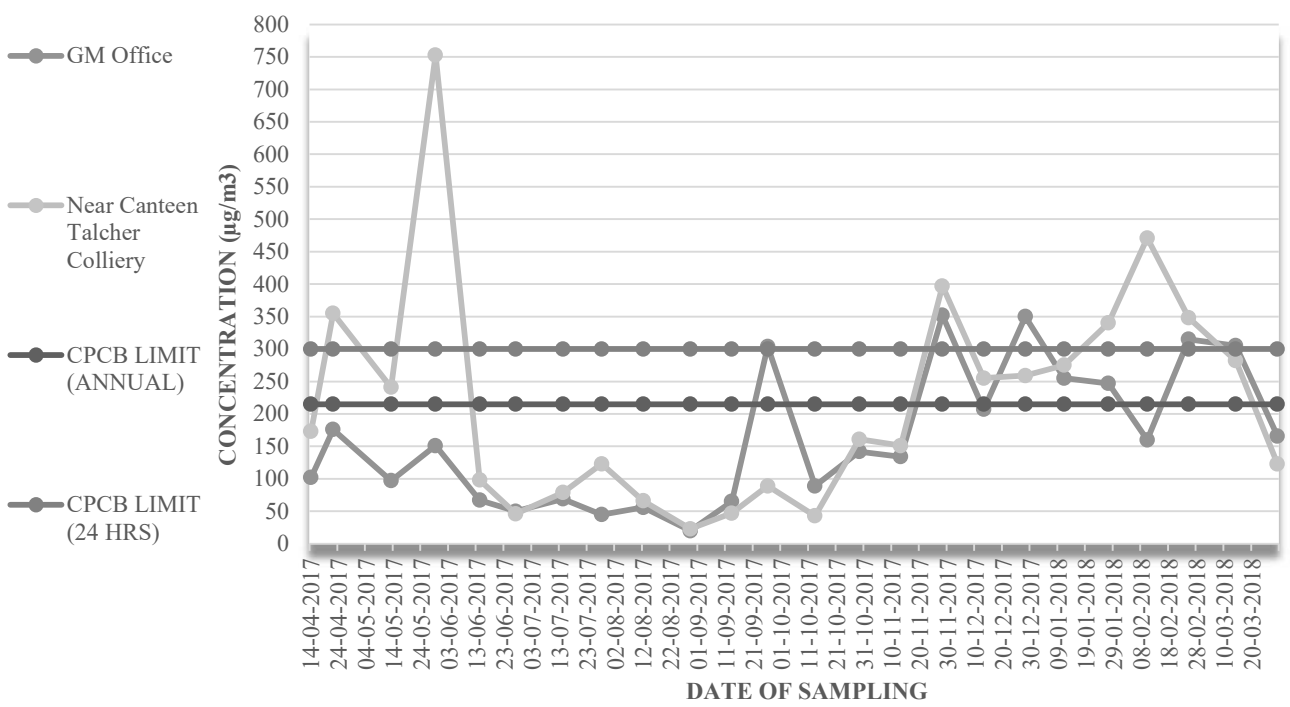
**Area: Talcher
Project: Talcher Colliery
Monitoring Station: Near Canteen Talcher Colliery**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14/04/2017	22	173	3.83	6	326	Sunny
24/04/2017	34	355	3.06	<6	717	Sunny
12/05/2017	24	241	1.63	10	469	Sunny
29/05/2017	56	753	1.93	<6	798	Sunny
14/06/2017	19	98	6.18	<6	235	Sunny & Evening Rainfall
27/06/2017	20	46	4.41	6	88	Cloudy & Rainfall
14/07/2017	23	79	1.63	10	197	Evening & Night Rainfall
28/07/2017	24	123	1.76	7	310	Cloudy
12/08/2017	43	66	1.37	<6	209	Sunny & Night Rainfall
29/08/2017	10	23	1.46	<6	65	Cloudy & Rainfall
13/09/2017	22	47	1.95	<6	67	Cloudy & Evening Rainfall
27/09/2017	32	89	1.31	<6	106	Sunny
13/10/2017	35	43	0.8	2.17	79	Cloudy & Evening Rainfall
27/10/2017	83	161	6.15	1.38	343	Sunny
13/11/2017	67	151	0.72	2.76	189	Sunny
28/11/2017	54	397	15.47	8.98	784	Cloudy & Sunny
13/12/2017	123	255	1.95	2.7	496	Sunny
28/12/2017	60	259	1.3	1.11	506	Sunny
11/01/2018	104	275	1.93	11	386	Sunny
27/01/2018	80	340	1.7	<6	525	Sunny
10/02/2018	21	471	0.38	25.21	792	Sunny
25/02/2018	78	348	1.66	<6	496	Sunny
14/03/2018	126	282	4.35	8.92	469	Sunny
29/03/2018	54	123	4.19	22.81	376	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	126.00	753.00	15.47	25.21	798.00	
Minimum	10.00	23.00	0.38	1.11	65.00	
Average	50.58	216.58	2.96	8.40	376.17	
95 Percentile	120.15	459.90	6.18	23.53	790.80	
98 Percentile	124.62	623.28	11.20	24.54	795.24	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

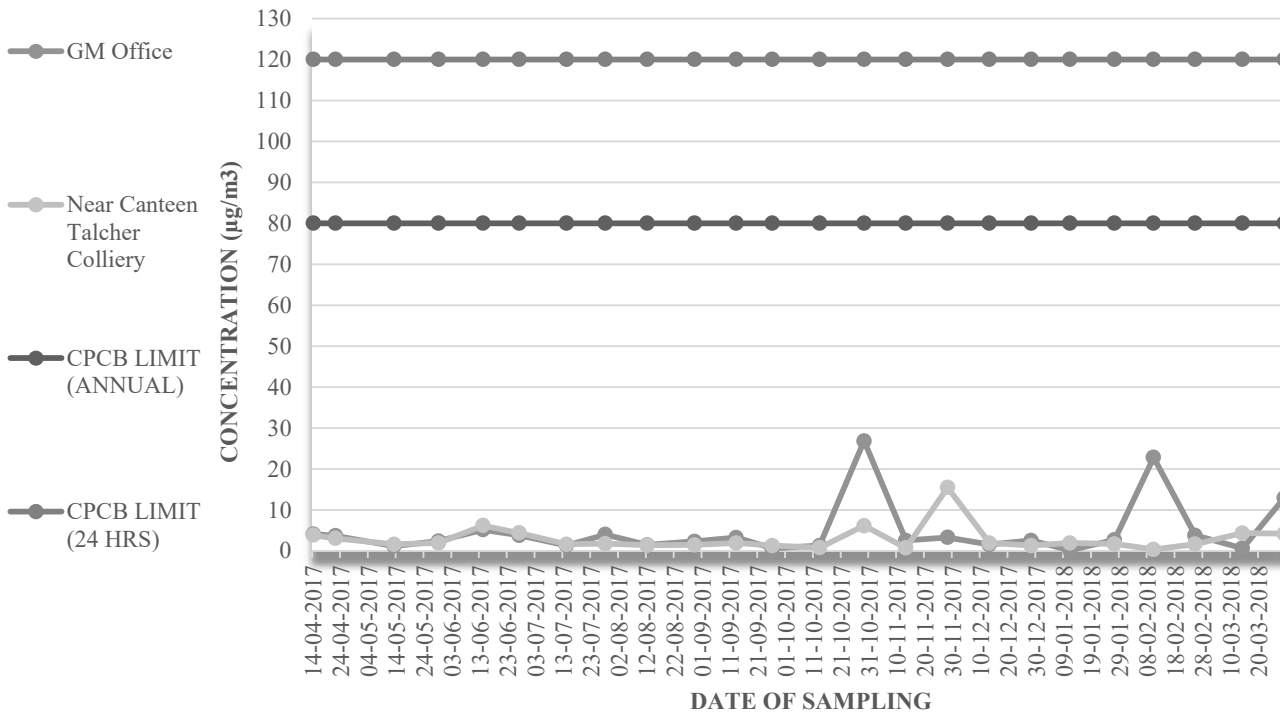
Graph Showing PM_{2.5} of Talcher Colliery UG



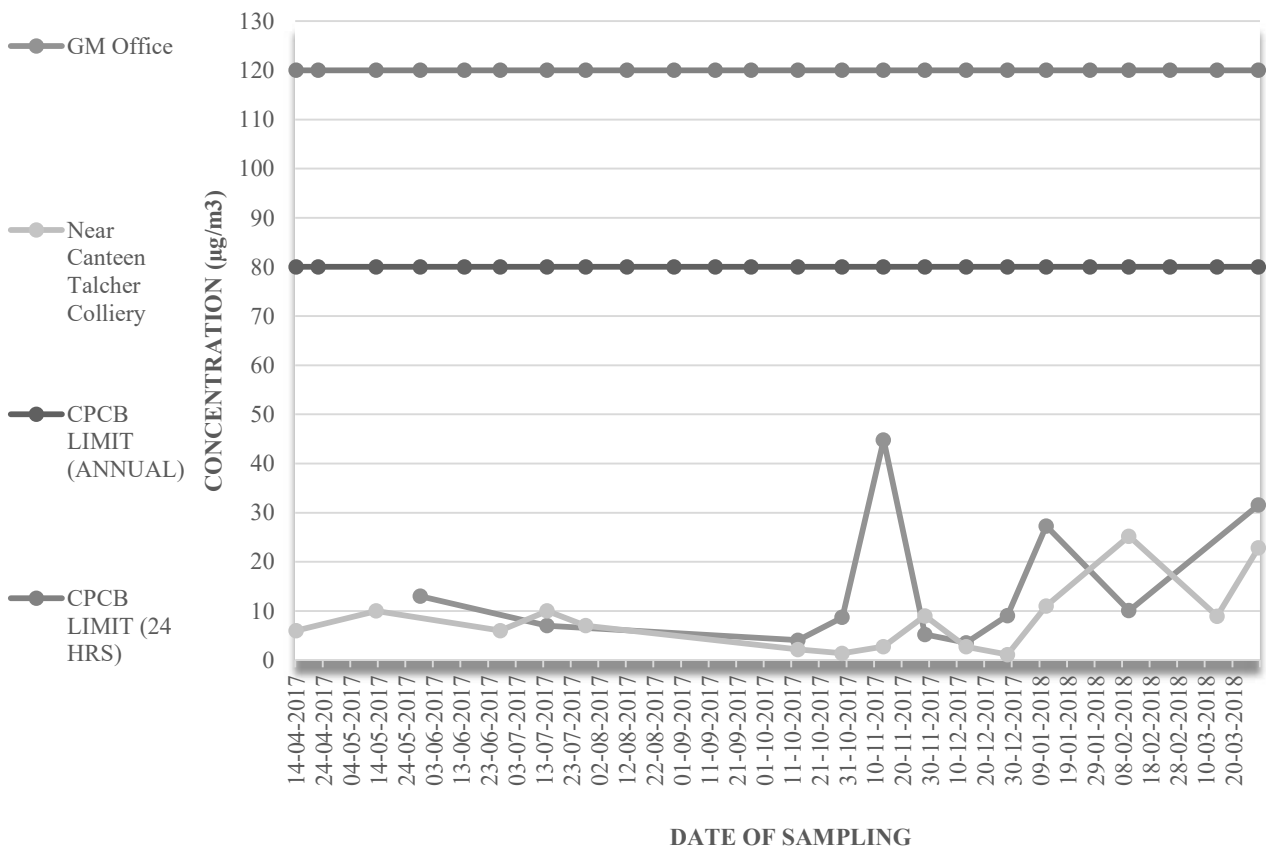
Graph Showing PM₁₀ of Talcher Colliery UG



Graph Showing SO₂ of Talcher Colliery UG



Graph Showing NO_x of Talcher Colliery UG



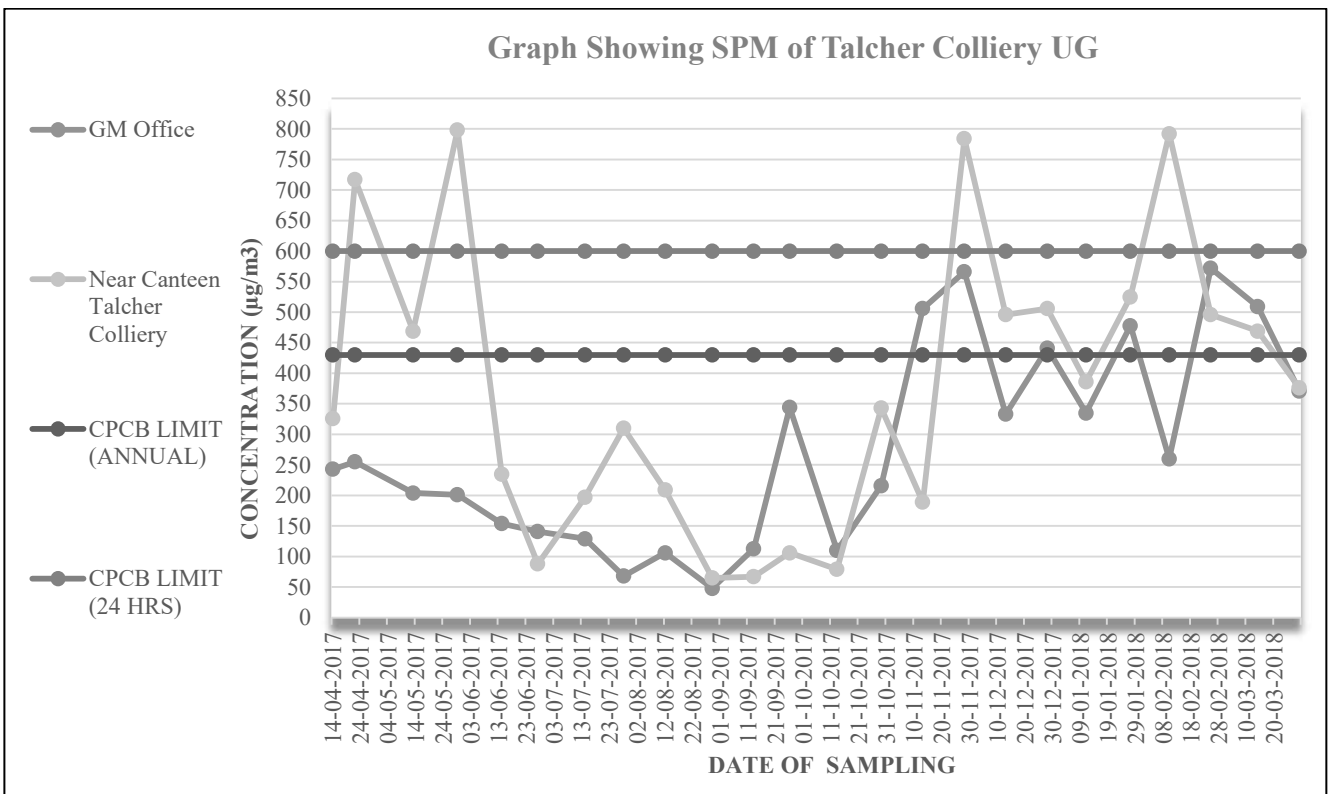


Table: 48

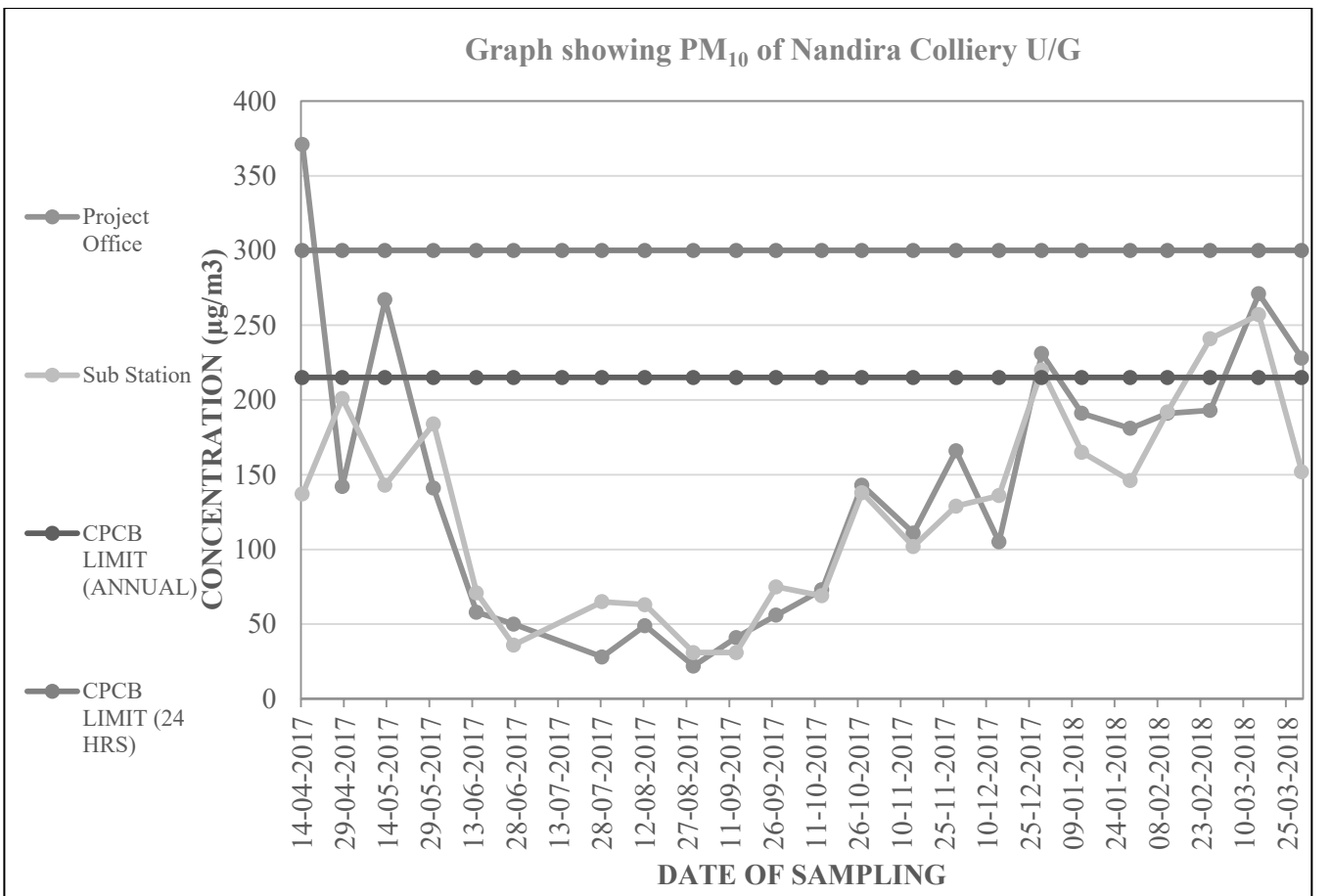
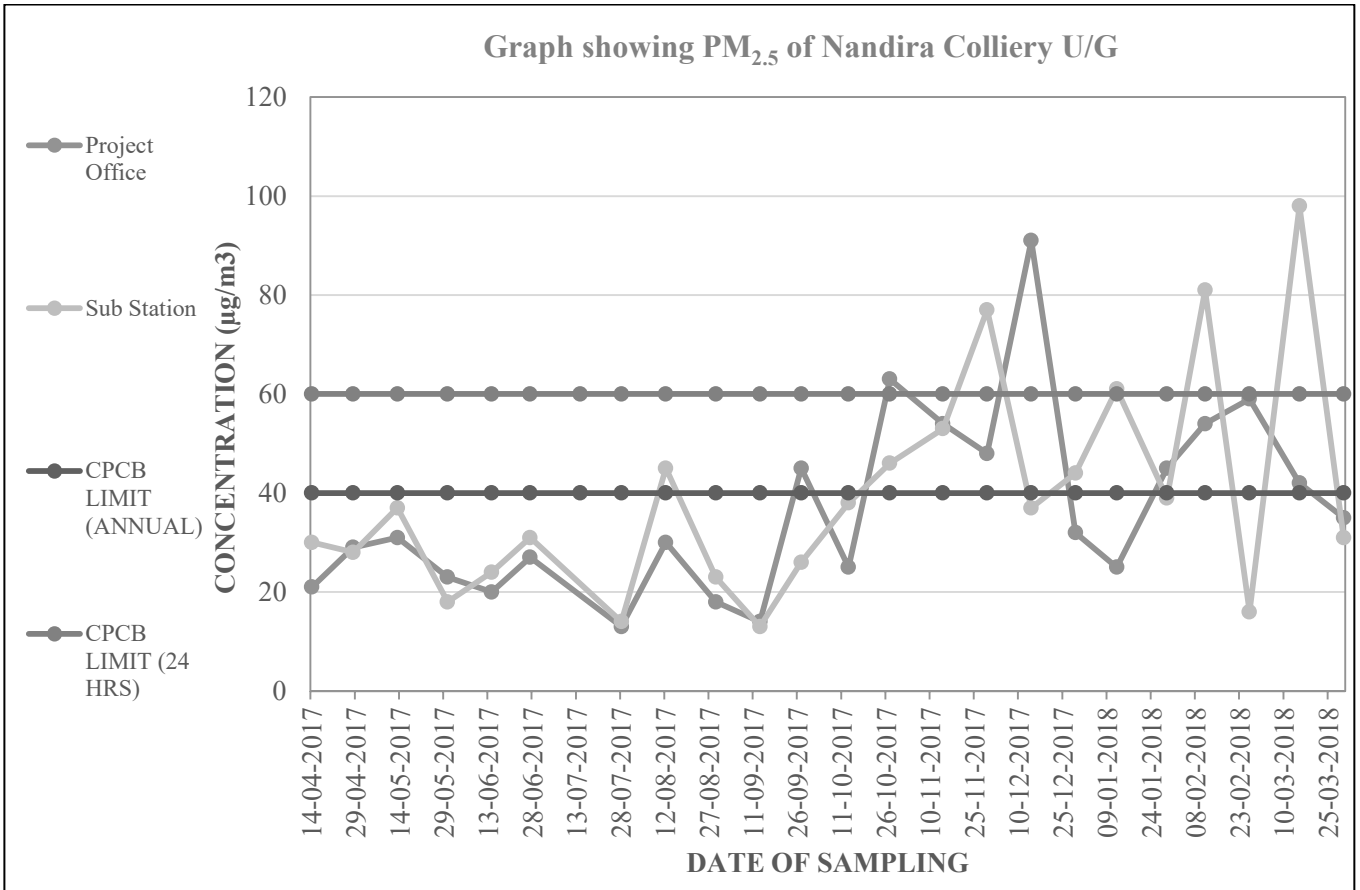
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Project Office

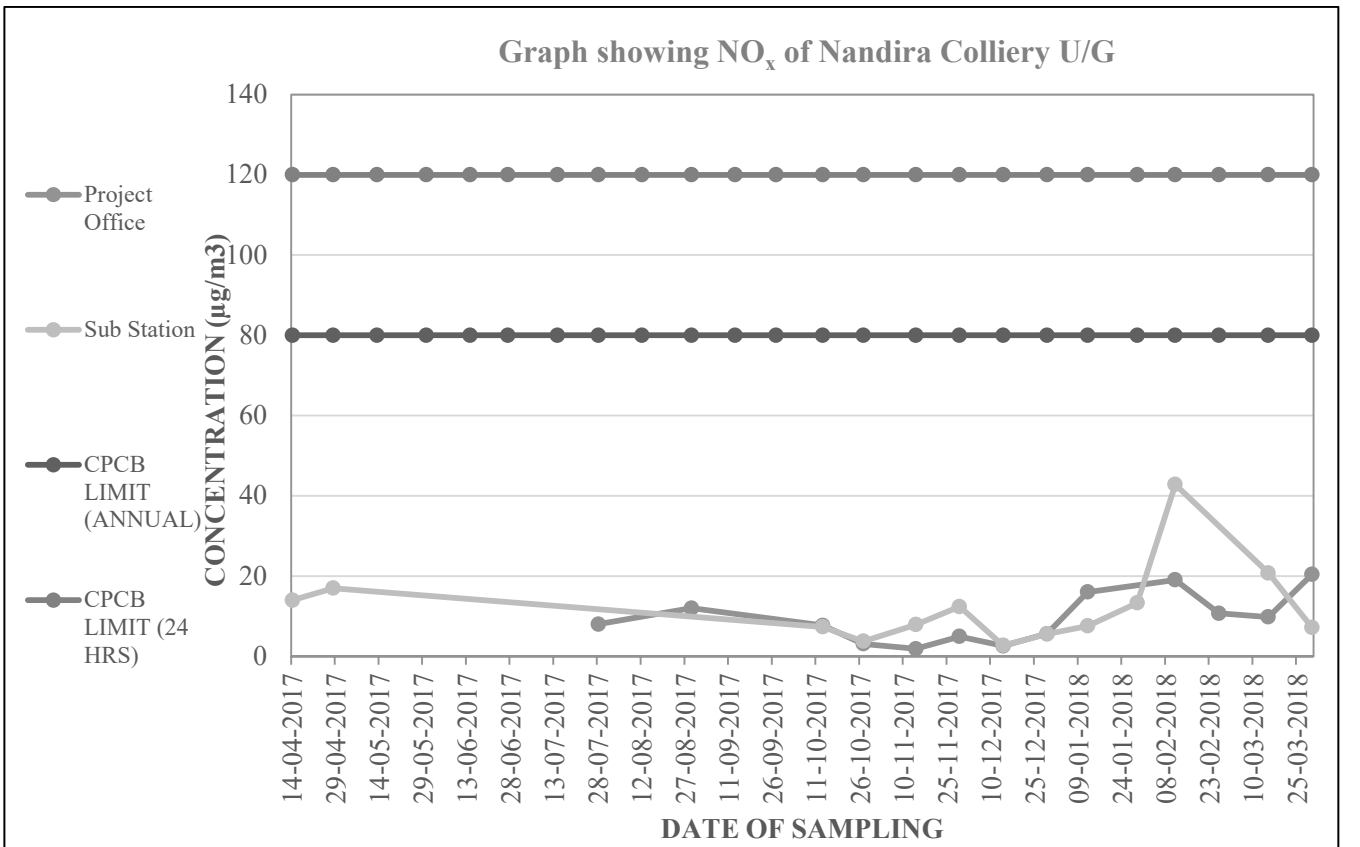
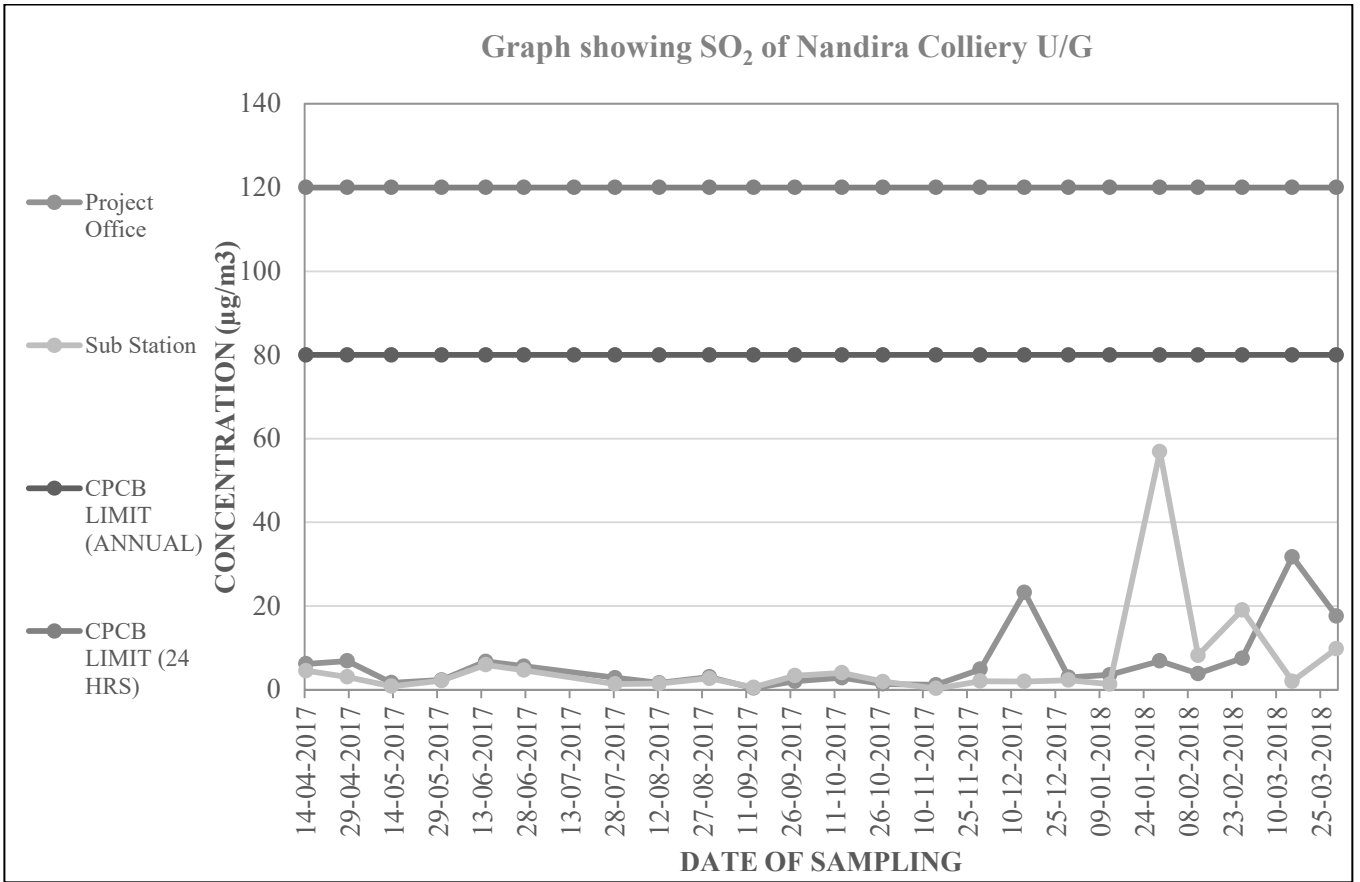
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14/04/2017	21	371	6.17	<6	421	Sunny
28/04/2017	29	142	6.87	<6	307	Sunny
13/05/2017	31	267	1.69	<6	468	Sunny & Evening Rainfall
30/05/2017	23	141	2.33	<6	297	Sunny
14/06/2017	20	58	6.75	<6	91	Sunny & Evening Rainfall
27/06/2017	27	50	5.62	<6	75	Cloudy & Rainfall
14/07/2017						Strike
28/07/2017	13	28	2.87	8	81	Cloudy
12/08/2017	30	49	1.64	<6	66	Sunny & Night Rainfall
29/08/2017	18	22	3.04	12	97	Cloudy & Rainfall
13/09/2017	14	41	0.37	<6	73	Cloudy & Evening Rainfall
27/09/2017	45	56	2.03	<6	86	Sunny
13/10/2017	25	73	2.85	7.69	128	Cloudy & Evening Rainfall
27/10/2017	63	143	1.37	3.1	293	Sunny
14/11/2017	54	111	1.18	1.88	191	Mostly Cloudy
29/11/2017	48	166	4.88	4.95	248	Sunny
14/12/2017	91	105	23.28	2.59	182	Sunny
29/12/2017	32	231	2.98	5.62	276	Sunny
12/01/2018	25	191	3.53	16.03	375	Sunny
29/01/2018	45	181	6.86	<6	357	Sunny
11/02/2018	54	191	3.85	19.07	378	Sunny
26/02/2018	59	193	7.53	10.74	459	Sunny
15/03/2018	42	271	31.74	9.8	440	Sunny
30/03/2018	35	228	17.59	20.42	294	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	91.00	371.00	31.74	20.42	468.00	
Minimum	13.00	22.00	0.37	1.88	66.00	
Average	36.70	143.87	6.39	9.38	247.09	
95 Percentile	62.60	270.60	22.71	19.61	457.10	
98 Percentile	78.68	327.00	28.02	20.10	464.04	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 49

**Area: Talcher
 Project: Nandira Colliery
 Monitoring Station: Sub-Station**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14/04/2017	30	137	4.53	14	413	Sunny
28/04/2017	28	201	3.05	17	424	Sunny
13/05/2017	37	143	0.83	<6	273	Sunny & Evening Rainfall
30/05/2017	18	184	2.16	<6	301	Sunny
14/06/2017	24	71	5.94	<6	122	Sunny & Evening Rainfall
27/06/2017	31	36	4.65	<6	67	Cloudy & Rainfall
14/07/2017	-	-	-	-	-	Strike
28/07/2017	14	65	1.35	<6	122	Cloudy
12/08/2017	45	63	1.49	<6	83	Sunny & Night Rainfall
29/08/2017	23	31	2.72	<6	56	Cloudy & Rainfall
14/09/2017	13	31	0.58	<6	76	Heavy Rainfall
27/09/2017	26	75	3.34	<6	93	Sunny
13/10/2017	38	69	4.05	7.33	139	Cloudy & Evening Rainfall
27/10/2017	46	138	1.93	3.76	190	Sunny
14/11/2017	53	102	0.3	7.89	149	Mostly Cloudy
29/11/2017	77	129	2.07	12.4	248	Sunny
14/12/2017	37	136	1.97	2.73	183	Sunny
29/12/2017	44	220	2.29	5.6	322	Sunny
12/01/2018	61	165	1.32	7.57	228	Sunny
29/01/2018	39	146	56.89	13.32	243	Sunny
11/02/2018	81	192	8.19	42.8	378	Sunny
26/02/2018	16	241	19.08	<6	346	Sunny
15/03/2018	98	257	2.03	20.78	460	Sunny
30/03/2018	31	152	9.82	7.21	259	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	98.00	257.00	56.89	42.80	460.00	
Minimum	13.00	31.00	0.30	2.73	56.00	
Average	39.57	129.74	6.11	12.49	225.00	
95 Percentile	80.60	238.90	18.15	29.59	422.90	
98 Percentile	90.52	249.96	40.25	37.52	444.16	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	





Graph Showing SPM of Nandira Colliery UG

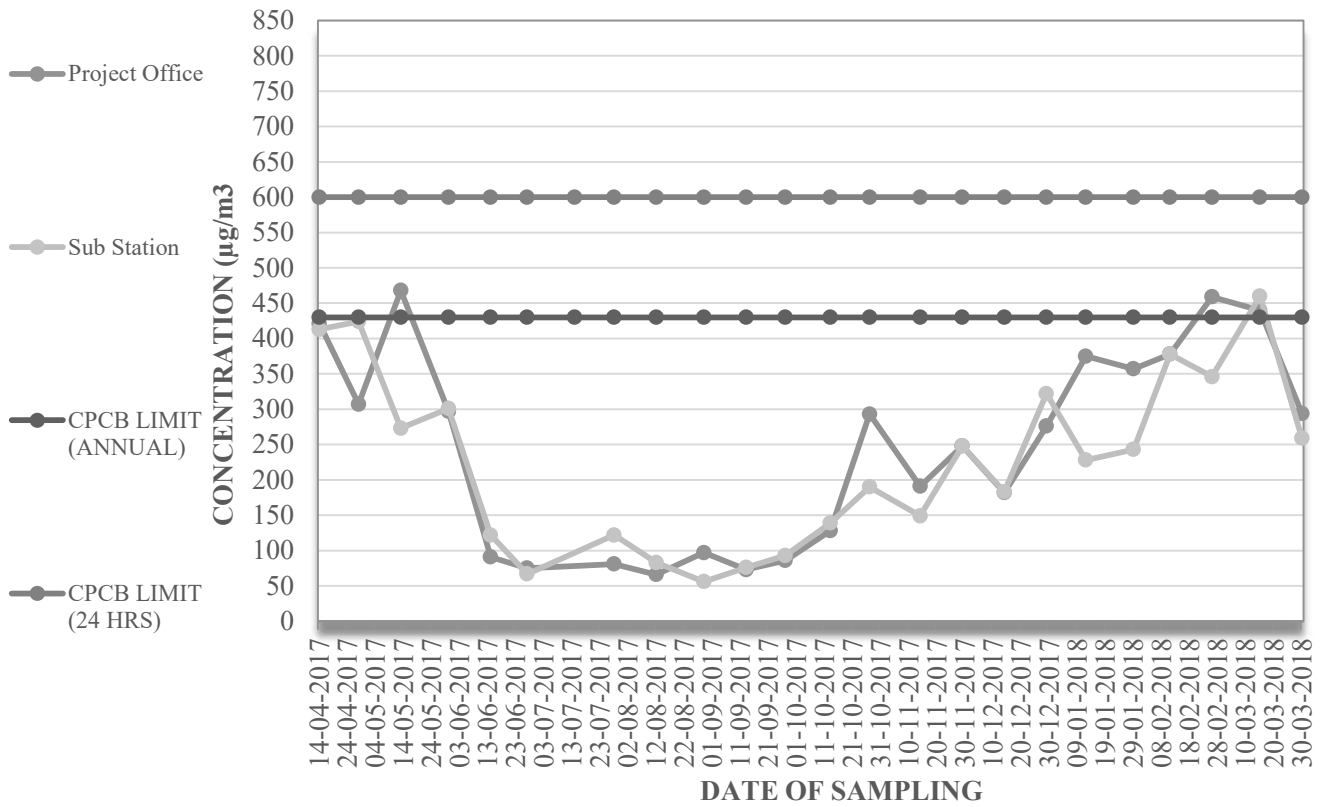


Table: 50

**Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Project Office**

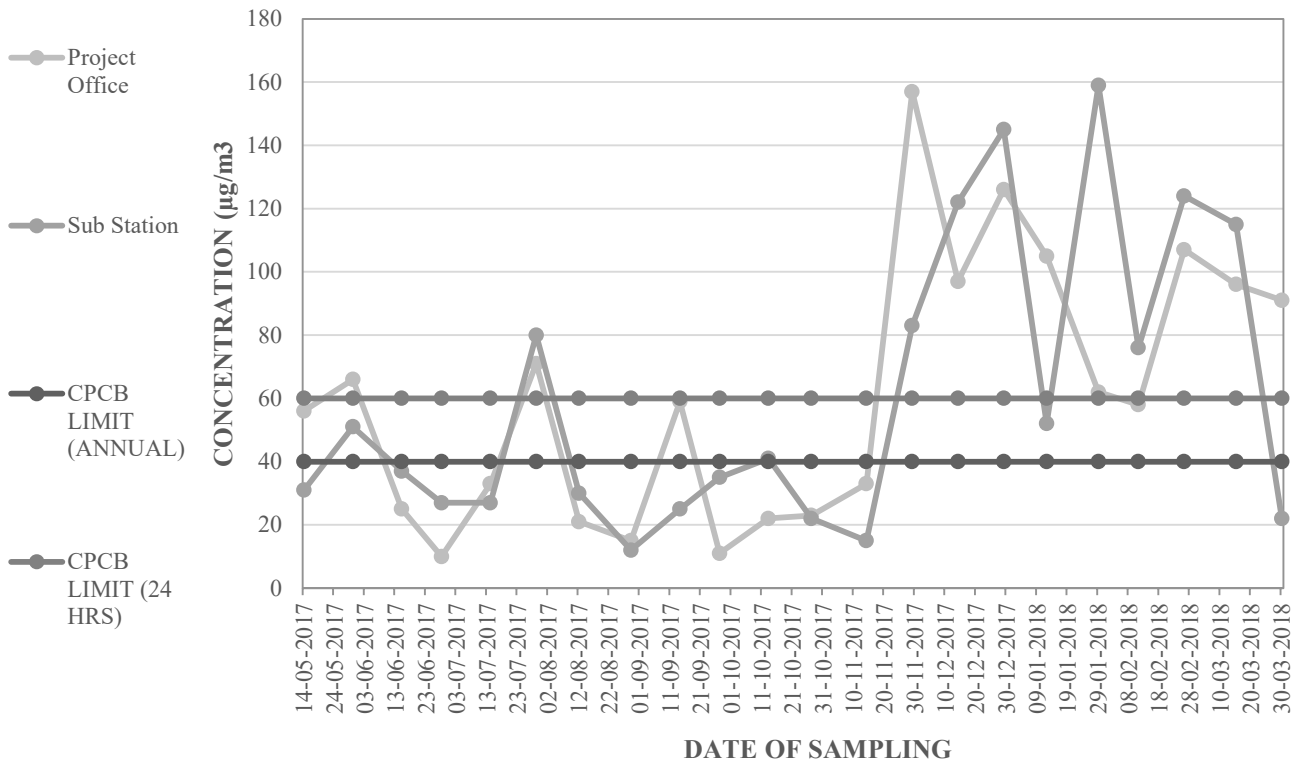
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14/05/2017	56	62	2.04	<6	176	Sunny
30/05/2017	66	199	1.94	<6	468	Sunny
15/06/2017	25	60	3.77	<6	143	Sunny & Evening Rainfall
28/06/2017	10	80	5.63	<6	150	Cloudy
14/07/2017	33	54	1.26	<6	104	Evening & Night Rainfall
29/07/2017	71	187	1.19	12	358	Cloudy & Rainfall
12/08/2017	21	65	2.8	<6	92	Sunny & Night Rainfall
29/08/2017	15	25	1.21	6	74	Evening Heavy Rainfall
14/09/2017	59	90	1.49	<6	111	Heavy Rainfall
27/09/2017	11	105	4.05	<6	124	Sunny
13/10/2017	22	99	6.93	9.82	178	Cloudy & Evening Rainfall
27/10/2017	23	239	38.09	4.18	383	Sunny
14/11/2017	33	141	1.19	4.54	374	Mostly Cloudy
29/11/2017	157	386	3.51	6.51	638	Sunny
14/12/2017	97	445	2.95	3.63	875	Sunny
29/12/2017	126	373	2.55	9.54	698	Sunny
12/01/2018	105	372	2.02	<6	702	Sunny
29/01/2018	62	481	11.18	11.09	705	Sunny
11/02/2018	58	277	1.6	16.83	578	Sunny
26/02/2018	107	421	13.73	<6	596	Sunny
15/03/2018	96	375	10.17	11.27	650	Sunny
30/03/2018	91	123	18.38	<6	363	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in $\mu\text{g}/\text{m}^3$
Maximum	157.00	481.00	38.09	16.83	875.00	
Minimum	10.00	25.00	1.19	3.63	74.00	
Average	61.09	211.77	6.26	8.67	388.18	
95 Percentile	125.05	443.80	18.15	14.42	704.85	
98 Percentile	143.98	465.88	29.81	15.86	803.60	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Table: 51

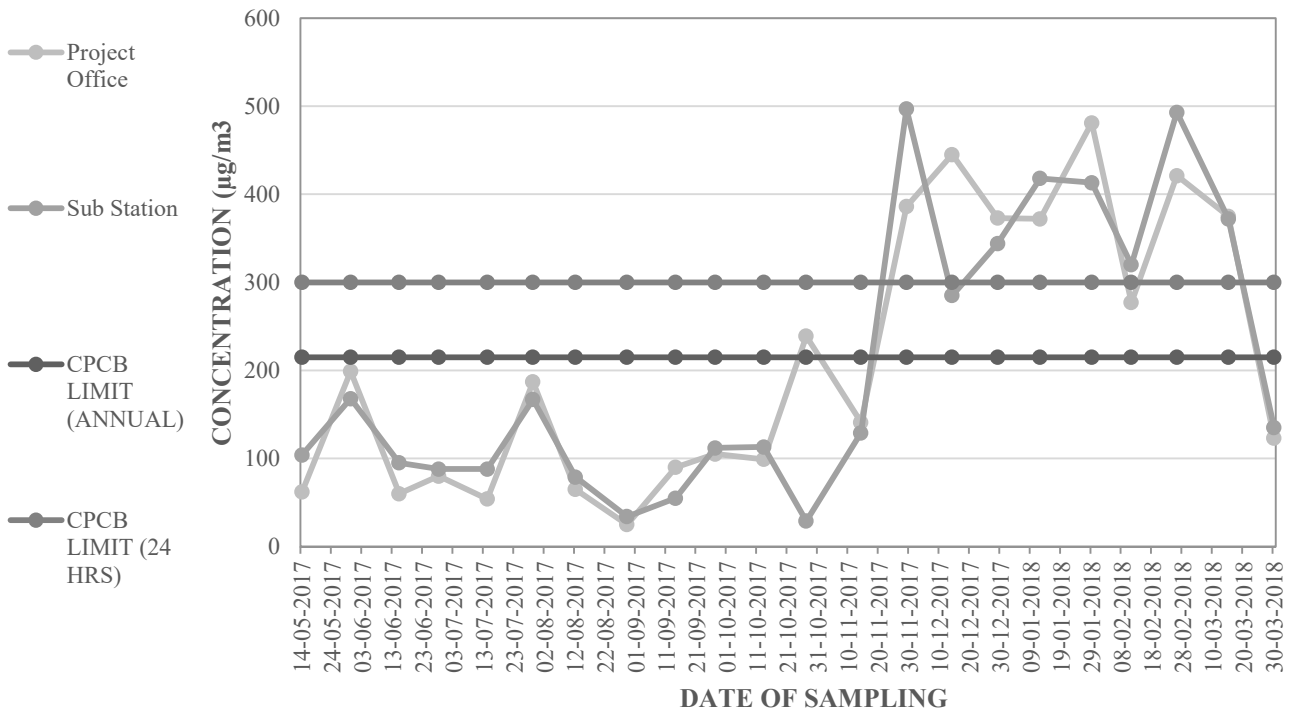
**Area: Talcher
 Project: Deulbera Colliery
 Monitoring Station: Sub-Station**

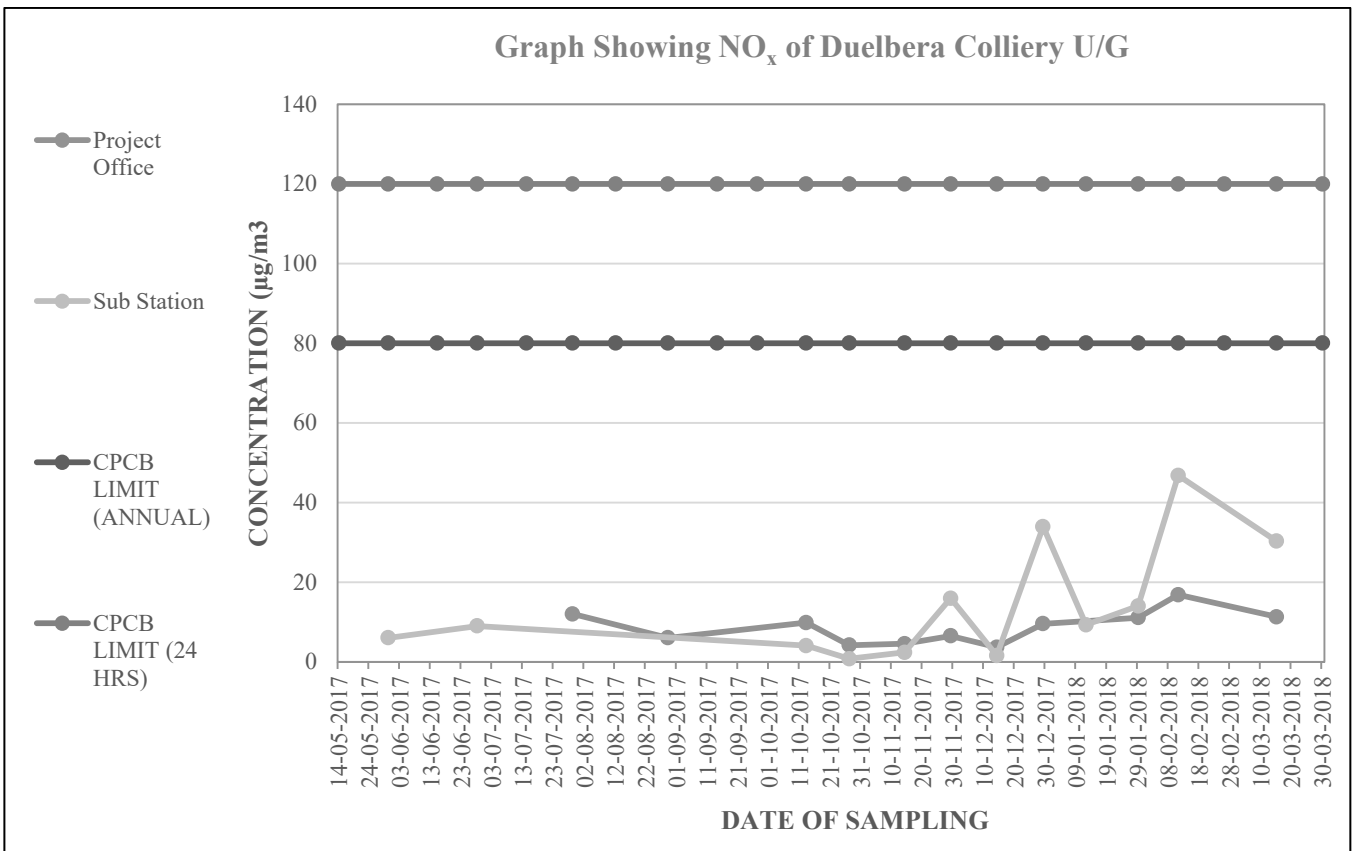
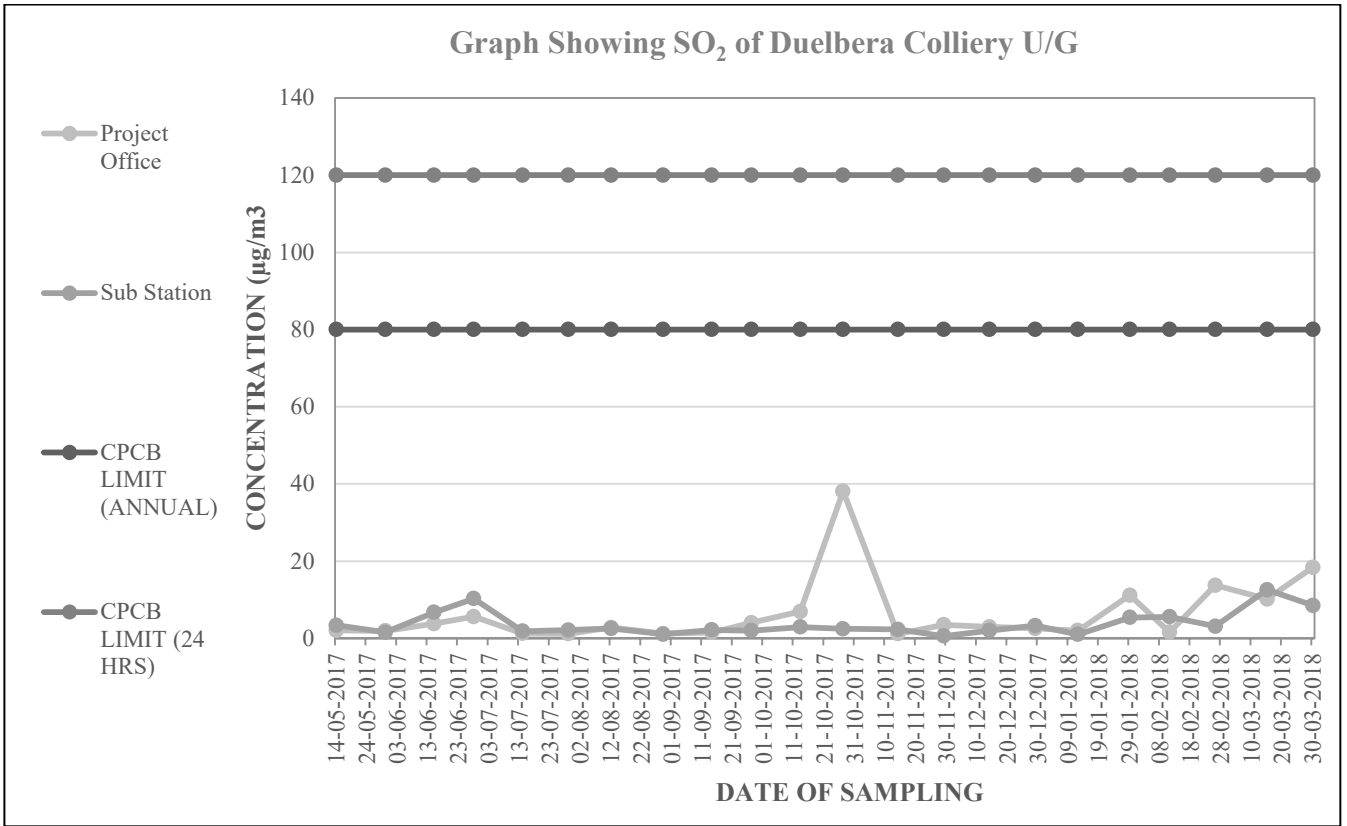
Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
14/05/2017	31	104	3.36	<6	239	Sunny
30/05/2017	51	168	1.53	6	375	Sunny
15/06/2017	37	95	6.72	<6	147	Sunny & Evening Rainfall
28/06/2017	27	88	10.29	9	110	Cloudy
14/07/2017	27	88	1.82	<6	142	Evening & Night Rainfall
29/07/2017	80	167	2.14	<6	466	Cloudy & Rainfall
12/08/2017	30	79	2.54	<6	207	Sunny & Night Rainfall
28/08/2017	12	34	1.05	<6	117	Evening Heavy Rainfall
14/09/2017	25	55	2.15	<6	114	Heavy Rainfall
27/09/2017	35	112	2.01	<6	139	Sunny
13/10/2017	41	113	2.93	4.05	236	Cloudy & Evening Rainfall
27/10/2017	22	29	2.44	0.76	67	Sunny
14/11/2017	15	129	2.31	2.36	233	Mostly Cloudy
29/11/2017	83	497	0.59	15.94	857	Sunny
14/12/2017	122	285	1.99	1.55	538	Sunny
29/12/2017	145	344	3.27	33.95	640	Sunny
12/01/2018	52	418	1.01	9.26	705	Sunny
29/01/2018	159	413	5.41	14.01	850	Sunny
11/02/2018	76	320	5.57	46.79	715	Sunny
26/02/2018	124	493	3.13	<6	587	Sunny
15/03/2018	115	372	12.56	30.28	501	Sunny
30/03/2018	22	135	8.53	<6	321	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in μg/m³
Maximum	159.00	497.00	12.56	46.79	857.00	
Minimum	12.00	29.00	0.59	0.76	67.00	
Average	60.50	206.27	3.79	14.50	377.55	
95 Percentile	143.95	489.25	10.20	39.73	843.25	
98 Percentile	153.12	495.32	11.61	43.97	854.06	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

Graph Showing PM_{2.5} of Duelbera Colliery U/G



Graph Showing PM₁₀ of Duelbera Colliery U/G





Graph Showing SPM of Duelbera Colliery U/G

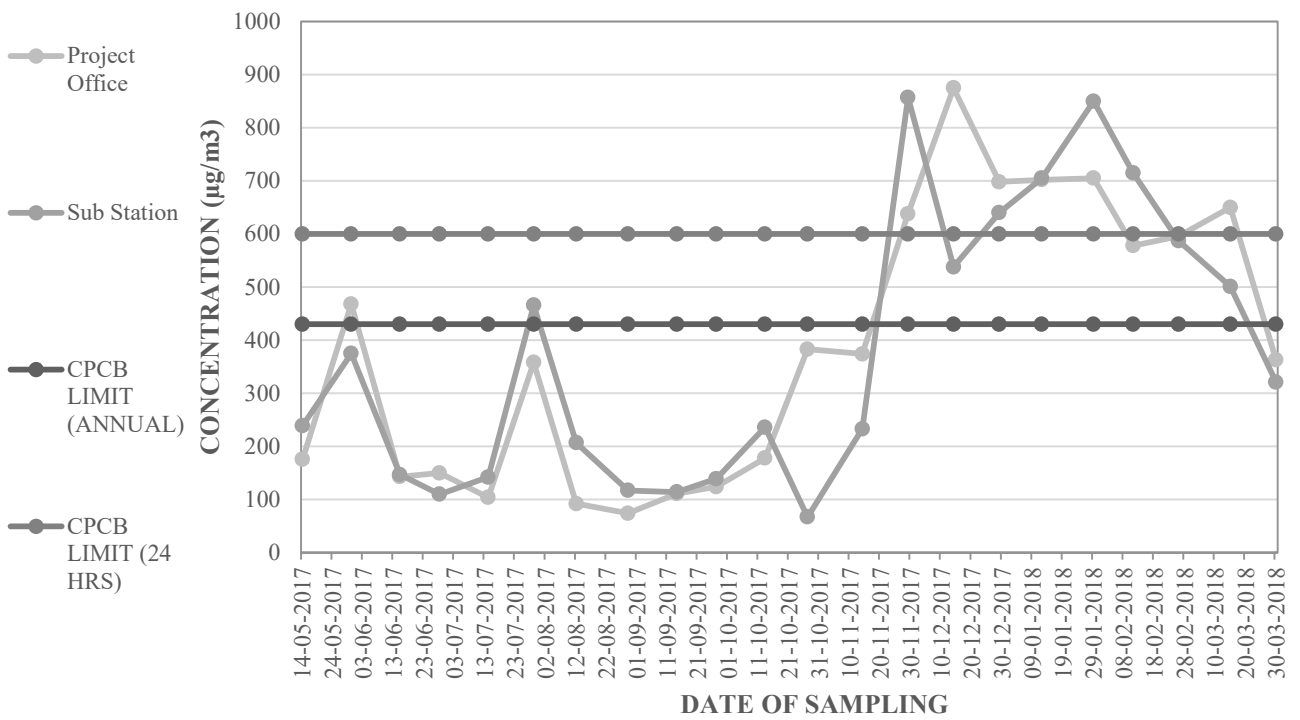
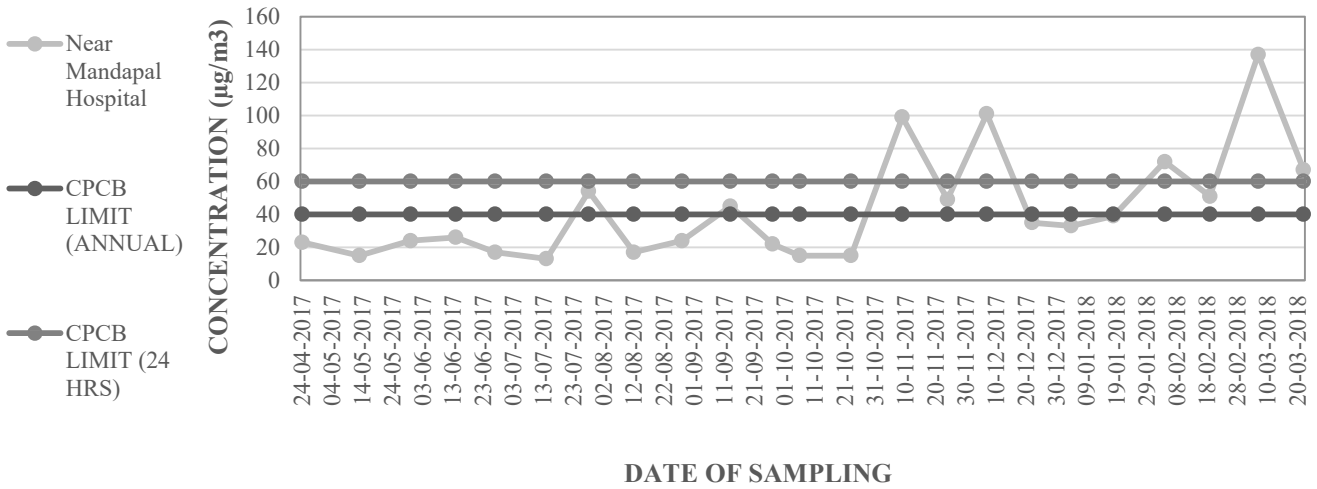


Table: 52

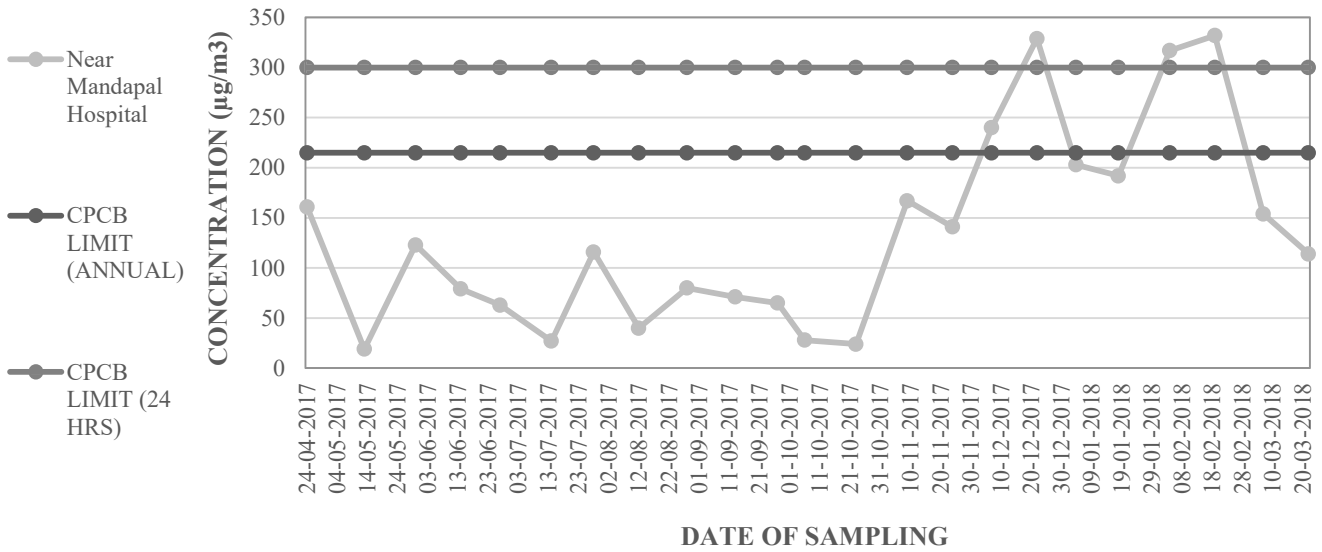
**Area: Talcher
Project: Mandapal Sand Mine
Monitoring Station: Near Mandapal Hospital**

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
24/04/2017	23	161	3.02	7	853	Sunny
13/05/2017	15	19	1.29	<6	56	Sunny & Evening Rainfall
30/05/2017	24	123	3.39	<6	151	Sunny
14/06/2017	26	79	5.34	<6	203	Sunny & Evening Rainfall
27/06/2017	17	63	4.95	<6	123	Cloudy & Rainfall
14/07/2017	13	27	1.45	<6	90	Evening & Night Rainfall
28/07/2017	54	116	2.41	<6	177	Cloudy
12/08/2017	17	40	1.27	<6	92	Sunny & Night Rainfall
28/08/2017	24	80	1.48	<6	119	Evening Heavy Rainfall
13/09/2017	45	71	2.82	<6	91	Cloudy & Evening Rainfall
27/09/2017	22	65	2.72	<6	83	Sunny
06/10/2017	15	28	2.09	3.94	59	Cloudy
23/10/2017	15	24	97.67	3.75	164	Sunny & Rainfall
09/11/2017	99	167	0.09	0.98	253	Sunny
24/11/2017	49	141	1.72	3.13	273	Sunny
07/12/2017	101	240	2.37	14.74	344	Sunny
22/12/2017	35	329	1.22	10.02	368	Sunny
04/01/2018	33	203	1.52	<6	449	Sunny
18/01/2018	39	192	8.41	19.78	441	Sunny
04/02/2018	72	317	29.06	41.24	591	Sunny
19/02/2018	51	332	7.79	<6	548	Sunny
07/03/2018	137	154	1.76	6.03	366	Sunny
22/03/2018	67	114	1.37	22.18	207	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in µg/m³
Maximum	137.00	332.00	97.67	41.24	853.00	
Minimum	13.00	19.00	0.09	0.98	56.00	
Average	43.17	134.13	8.05	12.07	265.26	
95 Percentile	100.80	327.80	27.00	31.71	586.70	
98 Percentile	121.16	330.68	67.48	37.43	737.72	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

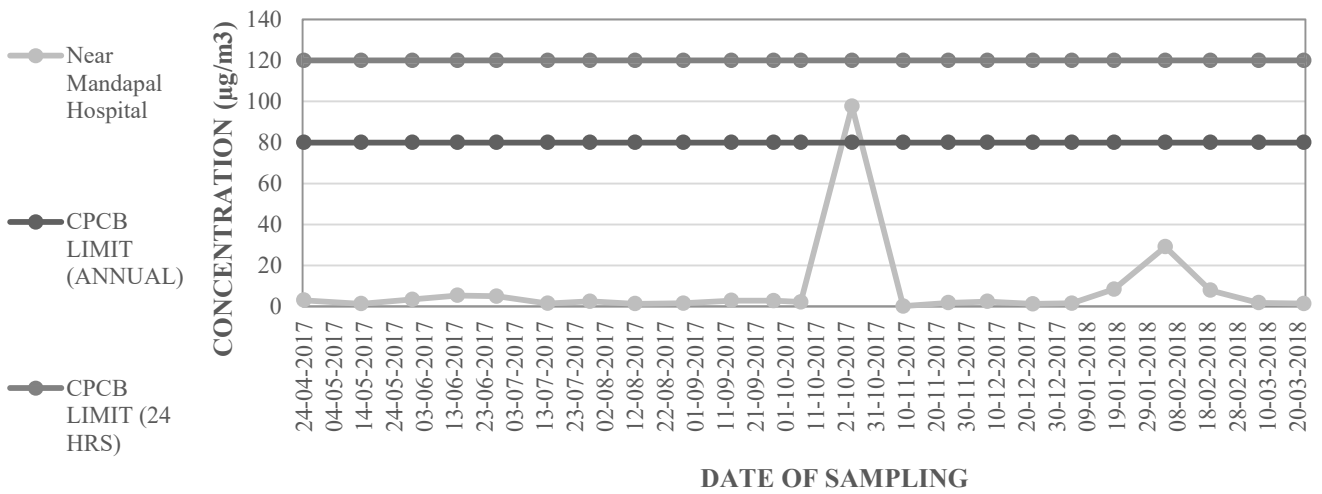
Graph Showing PM_{2.5} Near Mandapal Hospital



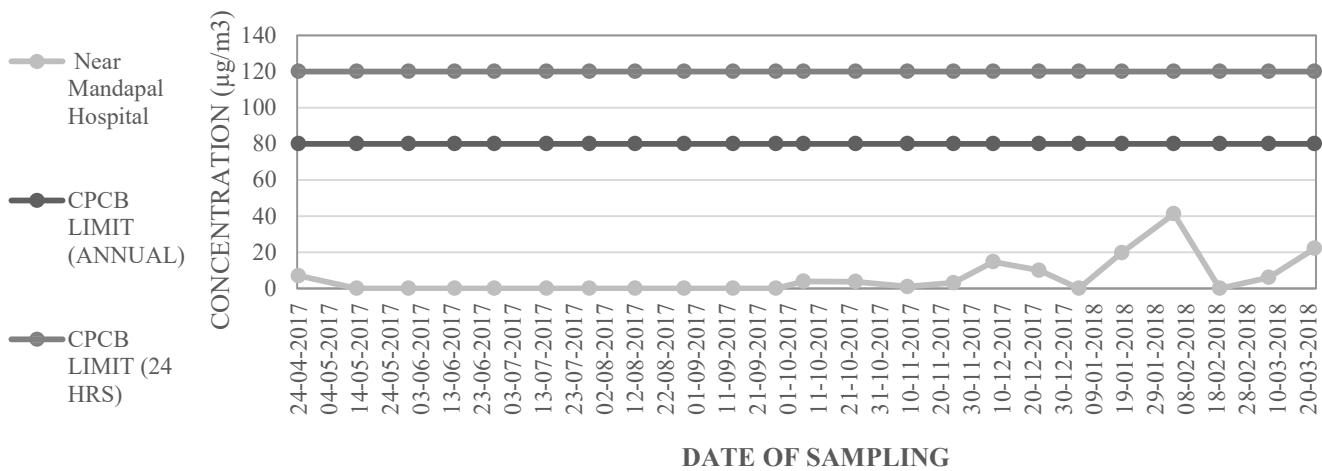
Graph Showing PM₁₀ Near Mandapal Hospital



Graph Showing SO₂ Near Mandapal Hospital



Graph Showing NO_x Near Mandapal Hospital



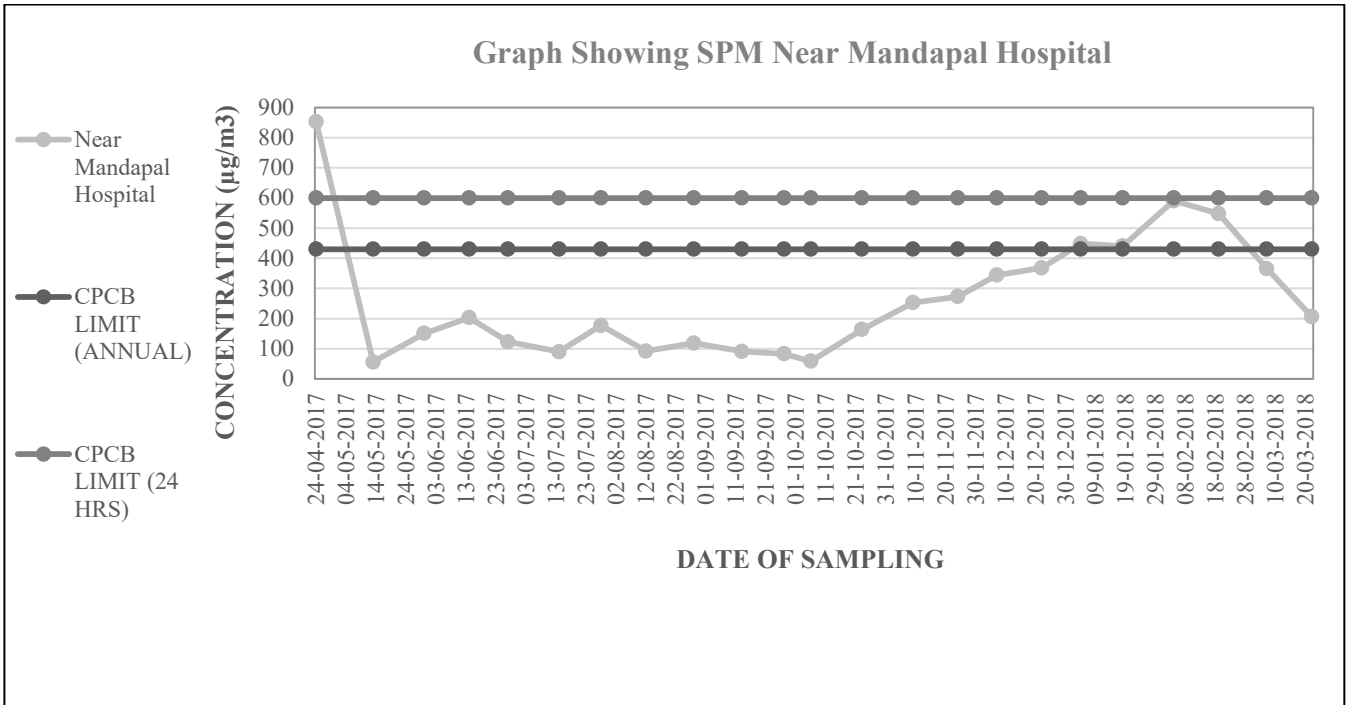
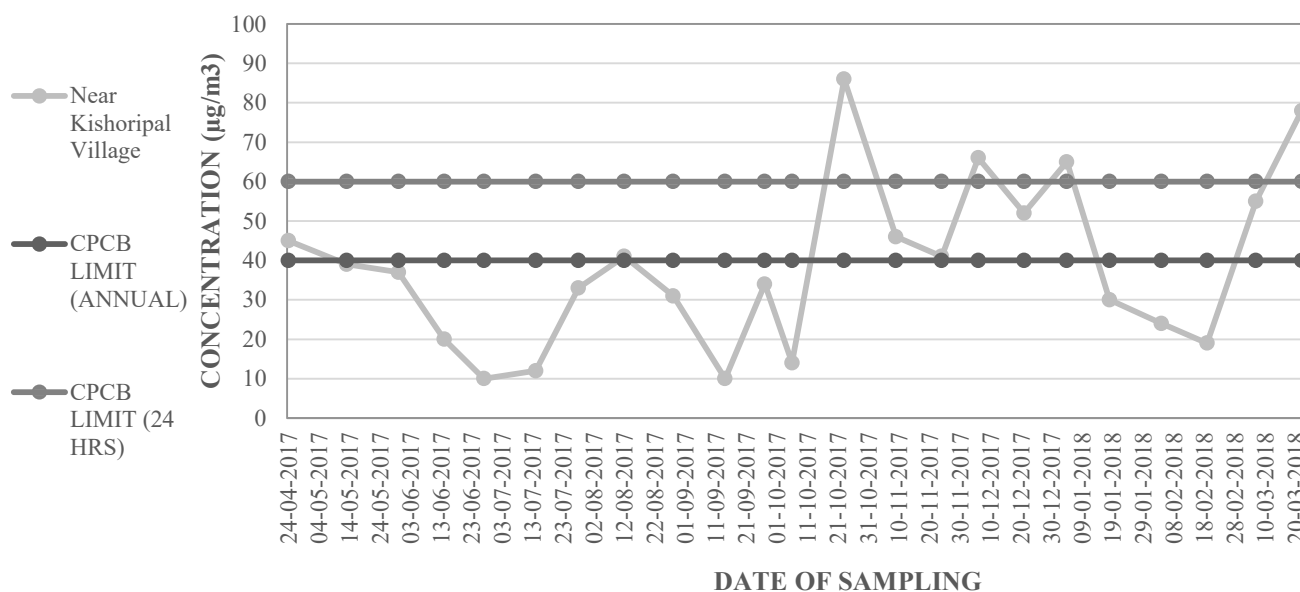


Table: 53

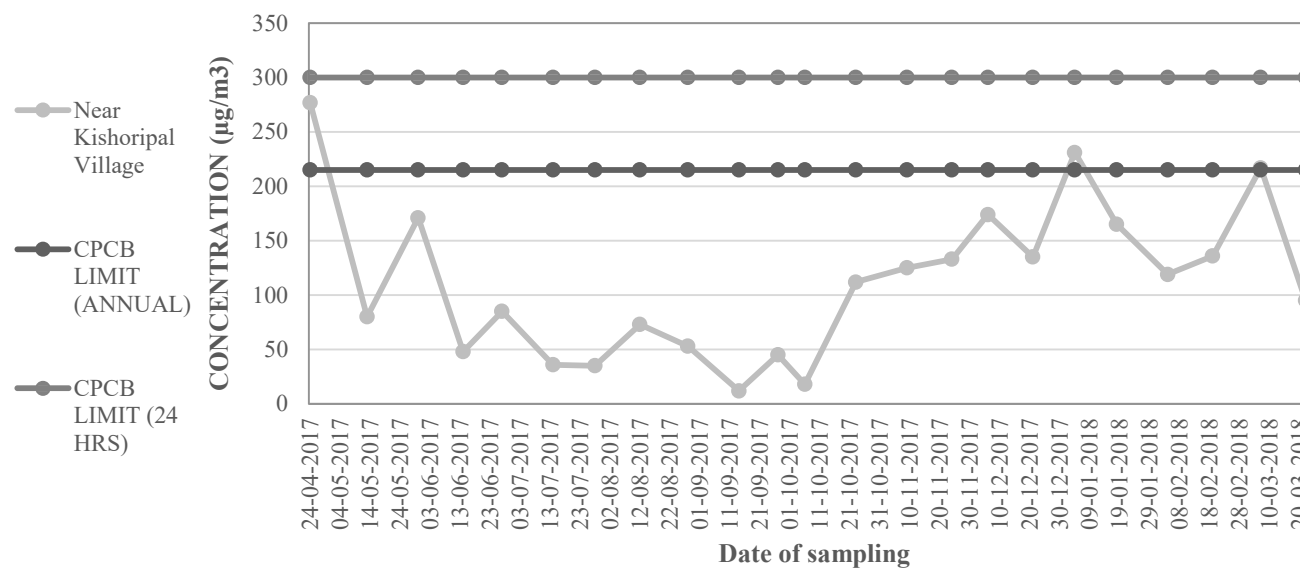
Area: Talcher
Project: Kakudi and Kishoripal
Monitoring Station: Near Kishoripal Village

Date of Sampling	PM _{2.5}	PM ₁₀	SO ₂	NO _x	SPM	Remarks
24/04/2017	45	277	2.9	<6	551	Sunny
13/05/2017	39	80	0.84	<6	150	Sunny & Evening Rainfall
30/05/2017	37	171	1.61	<6	339	Sunny
14/06/2017	20	48	4.87	<6	79	Sunny & Evening Rainfall
27/06/2017	10	85	4.74	<6	130	Cloudy
14/07/2017	12	36	6.88	<6	73	Evening & Night Rainfall
28/07/2017	33	35	2.39	7	59	Cloudy
12/08/2017	41	73	1.48	<6	94	Sunny & Night Rainfall
28/08/2017	31	53	1.12	<6	119	Cloudy & Rainfall
14/09/2017	10	12	0.62	<6	24	Heavy Rainfall
27/09/2017	34	45	1.47	<6	64	Sunny
06/10/2017	14	18	0.79	0.86	31	Cloudy
23/10/2017	86	112	6.6	1	166	Sunny & Rainfall
09/11/2017	46	125	1.2	6.77	142	Sunny
24/11/2017	41	133	1.04	7.01	196	Sunny
06/12/2017	66	174	1.94	4.76	259	Sunny
21/12/2017	52	135	2.33	1.97	241	Sunny
04/01/2018	65	231	0.5	<6	406	Sunny
18/01/2018	30	165	2.41	<6	247	Sunny
04/02/2018	24	119	22.87	51.49	207	Sunny
19/02/2018	19	136	1.43	<6	367	Sunny
07/03/2018	55	217	2.45	<6	377	Sunny
22/03/2018	78	95	0.96	<6	206	Sunny
Brief Statistics	PM_{2.5}	PM₁₀	SO₂	NO_x	SPM	All values in μg/m³
Maximum	86.00	277.00	22.87	51.49	551.00	
Minimum	10.00	12.00	0.50	0.86	24.00	
Average	38.61	111.96	3.19	10.11	196.83	
95 Percentile	76.80	229.60	6.85	35.92	403.10	
98 Percentile	82.48	256.76	15.83	45.26	487.20	
Standard (24 Hrs)	60	300	120	120	600	
Standard (Annual)	40	215	80	80	430	

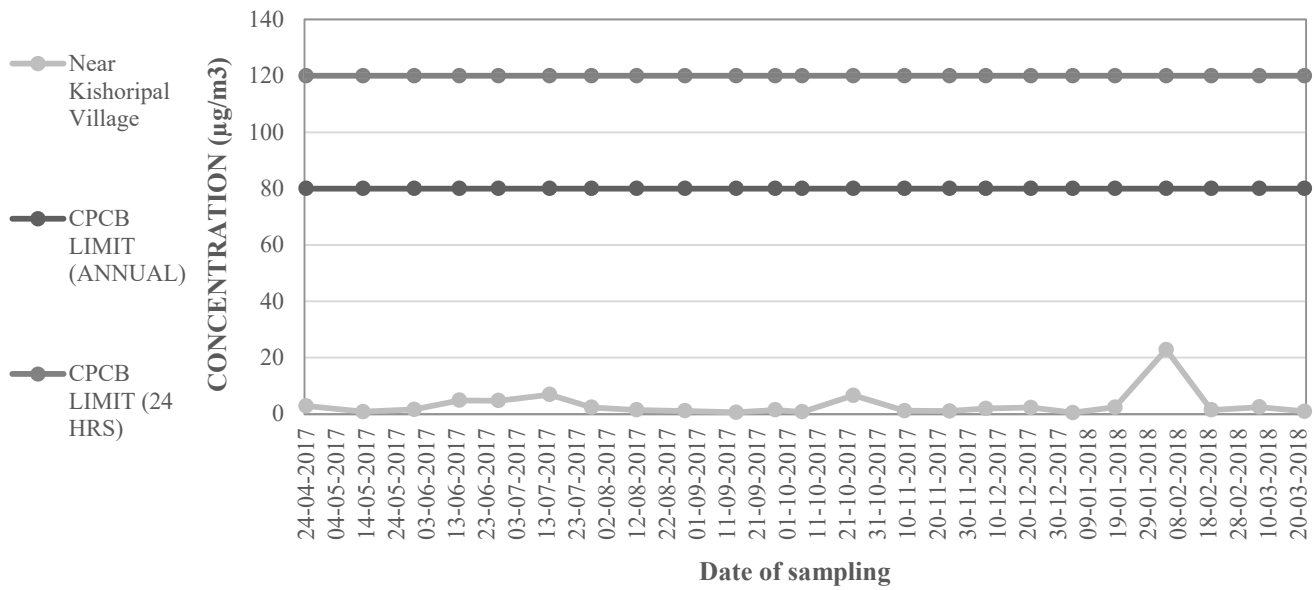
Graph Showing PM_{2.5} Near Kishoripal Village



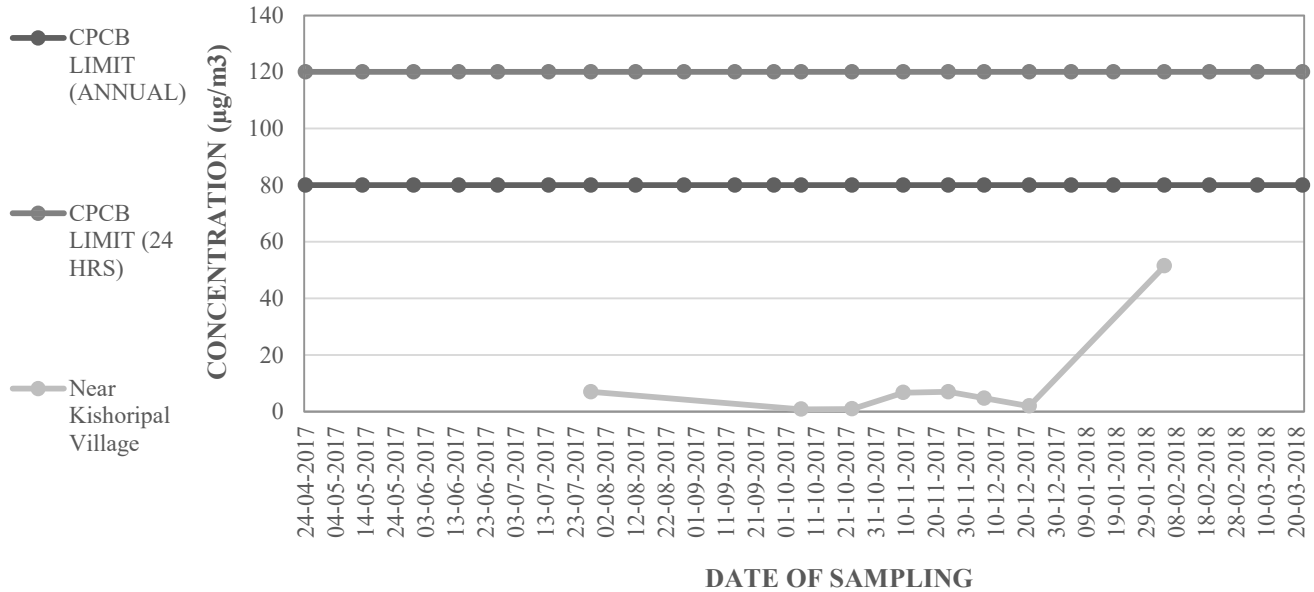
Graph Showing PM₁₀ Near Kishoripal Village



Graph Showing SO₂ Near Kishoripal Village



Graph Showing NO_x Near Kishoripal Village



Graph Showing SPM Near Kishoripal Village

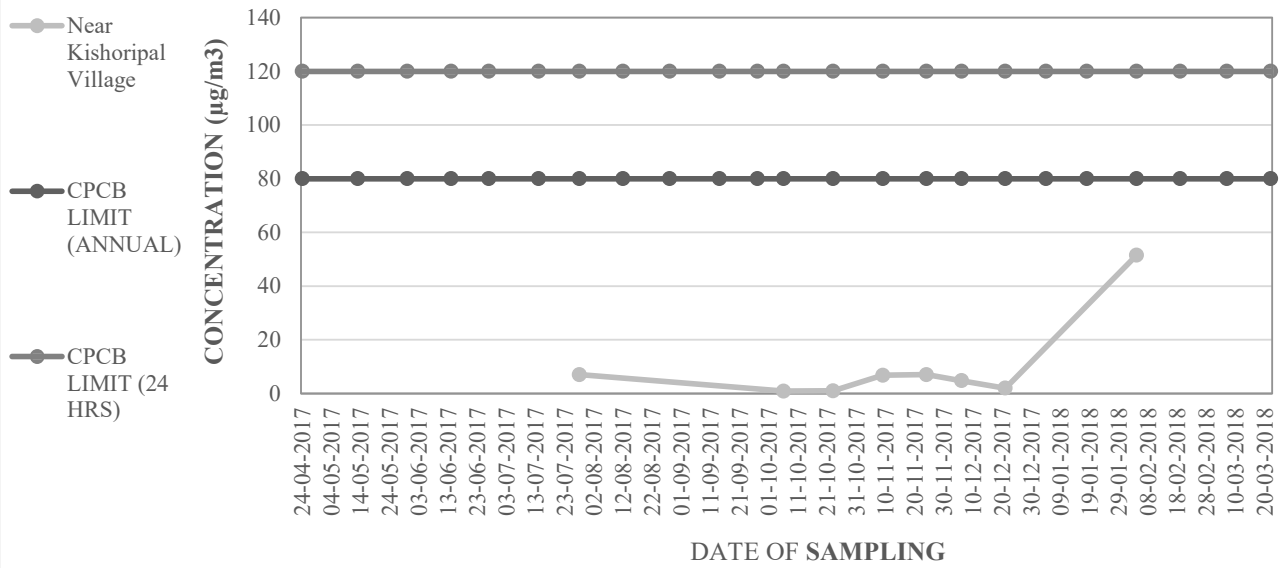


Table: 54
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Nakeipasi Village

Date of Sampling	Arsenic (As) (ng/m ³)	Nickel (Ni) (ng/m ³)	Lead (Pb) (µg/m ³)
04-07-2017	<1.0	<1.0	<0.1
24-07-2017	<1.0	<1.0	<0.1
07-06-2017	<1.0	8.82	<0.1
17-06-2017	<1.0	8.08	<0.1
03-05-2017	<1.0	14.07	<0.1
17-05-2017	<1.0	7.04	<0.1
Standards	06 (Annual)	20 (Annual)	1.0 (24 hourly)

Table: 55
Area: Hingula
Project: Hingula OCP
Monitoring Station: Chhotobereni Village

Date of Sampling	Arsenic (As) (ng/m ³)	Nickel (Ni) (ng/m ³)	Lead (Pb) (µg/m ³)
04-07-2017	<1.0	<1.0	<0.1
24-07-2017	<1.0	<1.0	<0.1
07-06-2017	<1.0	<1.0	<0.1
17-06-2017	<1.0	3.51	<0.1
03-05-2017	<1.0	22.67	<0.1
17-05-2017	2.06	5.95	<0.1
Standards	06 (Annual)	20 (Annual)	1.0 (24 hourly)

Table: 56
Area: Hingula
Project: Hingula OCP
Monitoring Station: Kumanda Village

Date of Sampling	Arsenic (As) (ng/m ³)	Nickel (Ni) (ng/m ³)	Lead (Pb) (µg/m ³)
04-07-2017	<1.0	<1.0	<0.1
24-07-2017	<1.0	<1.0	<0.1
07-06-2017	<1.0	4.21	<0.1
17-06-2017	<1.0	2.41	<0.1
03-05-2017	<1.0	15.02	<0.1
17-05-2017	1.94	<1.0	<0.1
Standards	06 (Annual)	20 (Annual)	1.0 (24 hourly)

Table: 57
Area: Hingula
Project: Balram OCP
Monitoring Station: Natada Village

Date of Sampling	Arsenic (As) (ng/m ³)	Nickel (Ni) (ng/m ³)	Lead (Pb) (µg/m ³)
04-07-2017	<1.0	<1.0	<0.1
24-07-2017	<1.0	<1.0	<0.1
07-06-2017	<1.0	<1.0	<0.1
17-06-2017	<1.0	3.51	<0.1
03-05-2017	1.56	11.97	<0.1
17-05-2017	2.06	10.3	<0.1
Standards	06 (Annual)	20 (Annual)	1.0 (24 hourly)

Table: 58
Area: Hingula
Project: Balram OCP
Monitoring Station: Solada Village

Date of Sampling	Arsenic (As) (ng/m ³)	Nickel (Ni) (ng/m ³)	Lead (Pb) (µg/m ³)
04-07-2017	<1.0	<1.0	<0.1
24-07-2017	<1.0	<1.0	<0.1
07-06-2017	<1.0	3.72	<0.1
17-06-2017	<1.0	2.49	<0.1
03-05-2017	2.3	15.29	<0.1
17-05-2017	2.72	14.79	<0.1
Standards	06 (Annual)	20 (Annual)	1.0 (24 hourly)

Table: 59
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: NTPC Chakk

Date of Sampling	Arsenic (As) (ng/m ³)	Nickel (Ni) (ng/m ³)	Lead (Pb) (µg/m ³)
04-07-2017	<1.0	<1.0	<0.1
24-07-2017	<1.0	<1.0	<0.1
07-06-2017	<1.0	1.96	<0.1
17-06-2017	<1.0	1.74	<0.1
03-05-2017	<1.0	17.21	<0.1
17-05-2017	3.74	7.11	<0.1
Standards	06 (Annual)	20 (Annual)	1.0 (24 hourly)

Table: 60
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Nakeipasi Village

Date of Sampling	Units	10/01/218	24/01/2018	Standards
Ozone (O ₃)	(ng/m ³)	12.07	8.55	06 (Annual)

Table: 61
Area: Hingula
Project: Hingula OCP
Monitoring Station: Chhotobereni Village

Date of Sampling	Units	10/01/2018	24/01/2018	Standards
Ozone(O ₃)	(ng/m ³)	6.36	15.87	06 (Annual)

Table: 62
Area: Hingula
Project: Hingula OCP
Monitoring Station: Kumunda Village

Date of Sampling	Units	10/01/2018	24/01/2018	Standards
Ozone(O ₃)	(ng/m ³)	3.56	15.54	06 (Annual)

Table: 63
Area: Hingula
Project: Balram OCP
Monitoring Station: Natada Village

Date of Sampling	Units	10/01/2018	24/01/2018	Standards
Ozone (O ₃)	(ng/m ³)	26.64	10.34	06 (Annual)

Table: 64
Area: Hingula
Project: Balram OCP
Monitoring Station: Solada Village

Date of Sampling	Units	10/01/2018	24/01/2018	Standards
Ozone (O ₃)	(ng/m ³)	26.28	8.58	06 (Annual)

Table: 65
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: NTPC Chakk

Date of Sampling	Units	10/01/2018	24/01/2018	Standards
Ozone (O ₃)	(ng/m ³)	12.38	18.64	06 (Annual)

Table: 66
Area: Jagannath
Project: Jagannath OCP

Monitoring Station	Units	Near View Point (A4)	Jagannath OCP-Time Office (A1)	Jagannath Colony (A2)	Near West Sump (A3)	Standard
Date of sampling		26/03/2018	26/03/2018	26/03/2018	26/03/2018	
Arsenic (As)	(ng/m3)	<1.0	<1.0	3.41	<1.0	6.0(Annual)
Nickel (Ni)	(ng/m3)	<1.0	<1.0	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m3)	9.92	10.41	14.61	9.61	
Chromium (Cr)	(µg/m3)	<0.1	<0.1	<0.1	<0.1	
Cadmium (Cd)	(µg/m3)	<0.1	<0.1	<0.1	<0.1	

Table: 67
Area: Jagannath
Project: Bhubaneswari OCP

Monitoring Station	Units	S-E of Mine	N-E of Mine	B.C.M.L. Workshop	Near external OB dump	Standard
Date of sampling		23/03/2018	24/03/2018	23/03/2018	24/03/2018	
Arsenic (As)	(ng/m3)	3.73	4.68	7.2	7.46	6.0(Annual)
Nickel (Ni)	(ng/m3)	<1.0	<1.0	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m3)	6.69	15.25	6.11	11.7	
Chromium (Cr)	(µg/m3)	<0.1	<0.1	<0.1	<0.1	Standard
Cadmium (Cd)	(µg/m3)	<0.1	<0.1	<0.1	<0.1	

Table: 68
Area: Bharatpur
Project: Ananta OCP

<i>Monitoring Station</i>	<i>Units</i>	Ananta Vihar Colony	Near Ananta OC project Office (A3)	Ananta Expansion area (A1)	Near Talcher west underground (A2)	<i>Standard</i>
<i>Date of sampling</i>		24/03/2018	29/03/2018	29/03/2018	29/03/2018	
<i>Arsenic (As)</i>	(ng/m ³)	<1.0	<1.0	7.6	<1.0	<i>6.0(Annual)</i>
<i>Nickel (Ni)</i>	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	<i>20(Annual)</i>
<i>Mercury(Hg)</i>	(ng/m ³)	11.56	13.47	16.95	13.64	
<i>Chromium (Cr)</i>	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	
<i>Cadmium (Cd)</i>	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	

Table: 69
Area: Bharatpur
Project: Bharatpur OCP

<i>Monitoring Station</i>	<i>Units</i>	Nakeipasi Village (NAAQS)	Near ETP	Near project office	Near civil maintenance office of Hingula Area	Near view point (A4)	Regional Store	<i>Standard</i>
<i>Date of sampling</i>		28/03/2018	24/03/2018	19/03/2018	24/03/2018	26/03/2018	26/03/2018	
<i>Lead (Pb)</i>	(µg/m ³)	<0.1	<0.1	7.56	<0.1	<1.0	0.12	<i>1.0 (24 hours)</i>
<i>Arsenic (As)</i>	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<i>6.0 (Annual)</i>
<i>Nickel (Ni)</i>	(ng/m ³)	<1.0	<1.0	16.63	<1.0	9.92	<1.0	<i>20 (Annual)</i>
<i>Mercury (Hg)</i>	(ng/m ³)	16.57	11.76	<0.1	11.61	<0.1	22.3	
<i>Chromium (Cr)</i>	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
<i>Cadmium (Cd)</i>	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	

Table: 70

**Area: Lingraj
Project: Lingraj OCP**

Monitoring Station	Units	S-E of Mine	N-E of Mine	B.C.M.L. Workshop	Near external OB dump	Standard
Date of sampling		23/03/2018	24/03/2018	23/03/2018	24/03/2018	
Arsenic (As)	(ng/m ³)	<1.0	<1.0	1.13	4.02	6.0(Annual)
Nickel (Ni)	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m ³)	8.58	13.47	19.61	8.15	
Chromium (Cr)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	
Cadmium (Cd)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	

Table: 71

**Area: Kaniha
Project: Kaniha OCP**

Monitoring Station	Units	Old site office	Project Office	Near time office Z-patch	NTPC Chakk, MGR (NAAQS)	Standard
Date of sampling		23/03/2018	22/03/2018	22/03/2018	21/03/2018	
Arsenic (As)	(ng/m ³)	3.72	4.12	4.22	3.22	6.0(Annual)
Nickel (Ni)	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m ³)	8.94	7.12	17.83	9.01	
Chromium (Cr)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	
Cadmium (Cd)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	

Table: 72

**Area: Hingula
Project: Hingula OCP**

Monitoring Station	Units	Village time office	Near project office	Chhotoberen i village (NAAQS)	Kumunda Village (NAAQS)	Standard
Date of sampling		19/03/2018	19/03/2018	20/03/2018	20/03/2018	
Arsenic (As)	(ng/m ³)	4.17	7.56	<1.0	<1.0	6.0(Annual)
Nickel (Ni)	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m ³)	17.45	16.63	18.3	10.35	
Chromium (Cr)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	
Cadmium (Cd)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	

Table: 73

**Area: Hingula
Project: Balram OCP**

Monitoring Station	Units	Solada Village (NAAQS)	On backfilled area near dozer shed	Natada Village (NAAQS)	Project Office Balram OCP	Standard
Date of sampling		20/03/2018	20/03/2018	20/03/2018	24/03/2018	
Arsenic (As)	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	6.0(Annual)
Nickel (Ni)	(ng/m ³)	<1.0	<1.0	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m ³)	5.32	21.25	5.22	20.90	
Chromium (Cr)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	
Cadmium (Cd)	(µg/m ³)	<0.1	<0.1	<0.1	<0.1	

Table: 74

Area: Hingula
Project: Hingula OCP

Monitoring Station	Units	G.M Office	Near canteen Talcher colliery	Standard
Date of sampling		29/03/2018	29/03/2018	
Arsenic (As)	(ng/m ³)	<1.0	<1.0	6.0(Annual)
Nickel (Ni)	(ng/m ³)	<1.0	<1.0	20(Annual)
Mercury(Hg)	(ng/m ³)	9.12	6.79	
Chromium (Cr)	(µg/m ³)	<0.1	<0.1	
Cadmium (Cd)	(µg/m ³)	<0.1	<0.1	

TABLES FOR NOISE LEVEL MONITORING DATA

Table: 75

Noise Table:
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Jagannath OCP-Time Office (A1)

DATE OF SAMPLING	DAY	NIGHT
13-04-2017	60.2	62.3
24-04-2017	64.0	64.5
12-05-2017	65.3	64.1
29-05-2017	64.5	63.2
13-06-2017	64.3	63.9
22-06-2017	64.9	65.0
12-07-2017	63.6	63.1
26-07-2017	62.5	63.1
10-08-2017	64.8	63.1
25-08-2017	64.6	64.2
11-09-2017	63.5	64.4
25-09-2017	63.6	62.7
07-10-2017	64.2	62.9
24-10-2017	65.6	61.6
10-11-2017	64.2	63.8
25-11-2017	64.1	63.5
08-12-2017	64.2	63.5
25-12-2017	64.2	63.8
08-01-2018	64.7	63.7
22-01-2018	64.2	63.9
07-02-2018	63.9	62.7
22-02-2018	64.7	62.9
10-03-2018	64.0	63.9
26-03-2018	63.9	61.7
Brief Statistic	Day	Night
Minimum	60.2	61.6
Maximum	65.6	65.0
Mean	64.1	63.4
Noise Standard	75	70

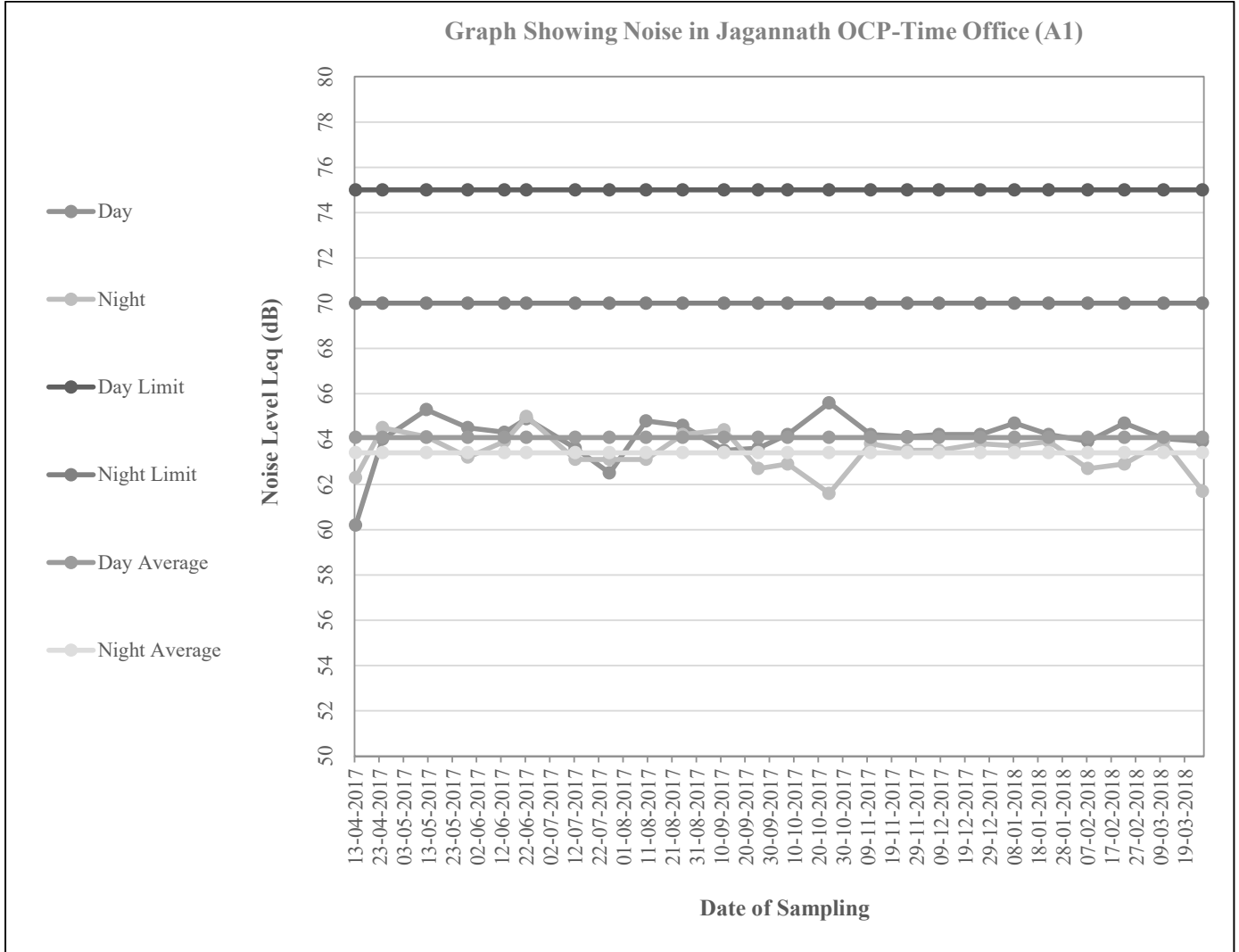


Table: 76

Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Jagannath Colony (A2)

DATE OF SAMPLING	DAY	NIGHT
13/04/2017	59.4	56.6
24/04/2017	61.2	53.4
12/05/2017	62.1	59.5
29/05/2017	62.1	59.5
13/06/2017	63.1	59.7
22/06/2017	62.7	61.4
12/07/2017	60.2	58.7
26/07/2017	61.9	59.2
10/08/2017	60.9	58.8
25/08/2017	60.1	57.5
11/09/2017	62	59.7
25/09/2017	61.9	59.8
07/10/2017	61.7	58.7
24/10/2017	61.2	59.5
10/11/2017	60.1	59.5
25/11/2017	61.3	60.0
08/12/2017	61.4	59.2
25/12/2017	62.7	60.5
08/01/2018	61.5	55.2
22/01/2018	61.5	59.5
07/02/2018	60.8	59.4
22/02/2018	61.8	58.6
10/03/2018	60.8	57.5
26/03/2018	60.3	58.3
Brief Statistic (in dB)	Day	Night
Minimum	59.4	53.4
Maximum	63.1	61.4
Mean	61.4	58.7
Noise Standard	75	70

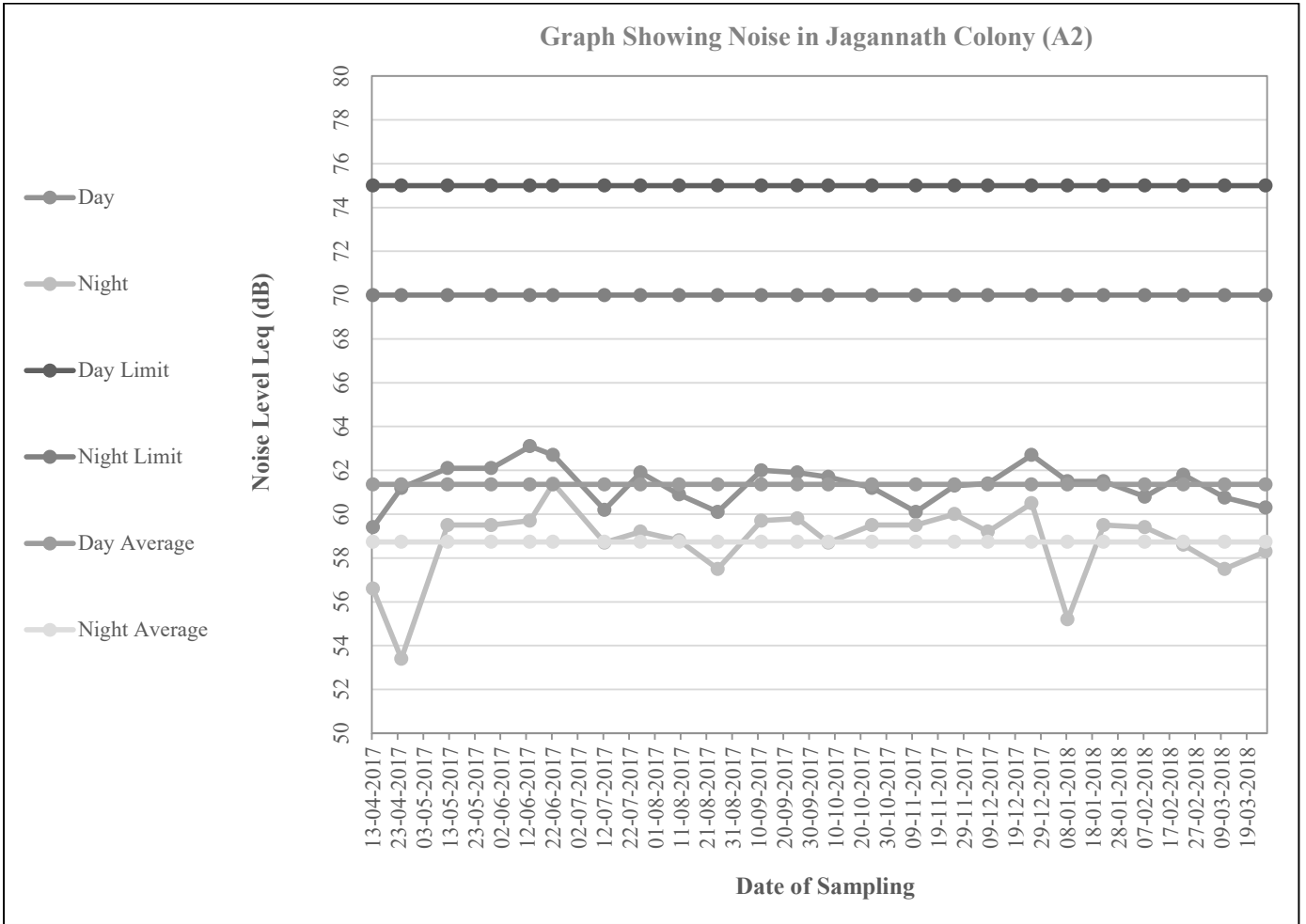


Table: 77

**Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Near View Point(A4)**

DATE OF SAMPLING	DAY	NIGHT
13-04-2017	60.5	67.4
24-04-2017	66.4	69.5
12-05-2017	67.8	67.1
29-05-2017	67.5	68.9
12-06-2017	66.9	68.0
22-06-2017	68.3	63.9
12-07-2017	67.1	65.3
26-07-2017	64.2	64.6
11-08-2017	67.5	66.9
28-08-2017	64.1	62.8
12-09-2017	66.5	65.6
26-09-2017	67.5	67.7
07-10-2017	69.1	67.6
24-10-2017	68.6	67.3
10-11-2017	68.6	67.8
25-11-2017	65.9	64.7
08-12-2017	65.9	65.4
25-12-2017	65.9	65.2
08-01-2018	67.6	60.4
22-01-2018	67.4	65.8
07-02-2018	67.2	65.9
22-02-2018	66.8	66.2
10-03-2018	64.1	64.2
26-03-2018	65.9	63.6
Brief Statistic (in dB)	Day	Night
Minimum	60.5	60.4
Maximum	69.1	69.5
Mean	66.6	65.9
Noise Standard	75	70

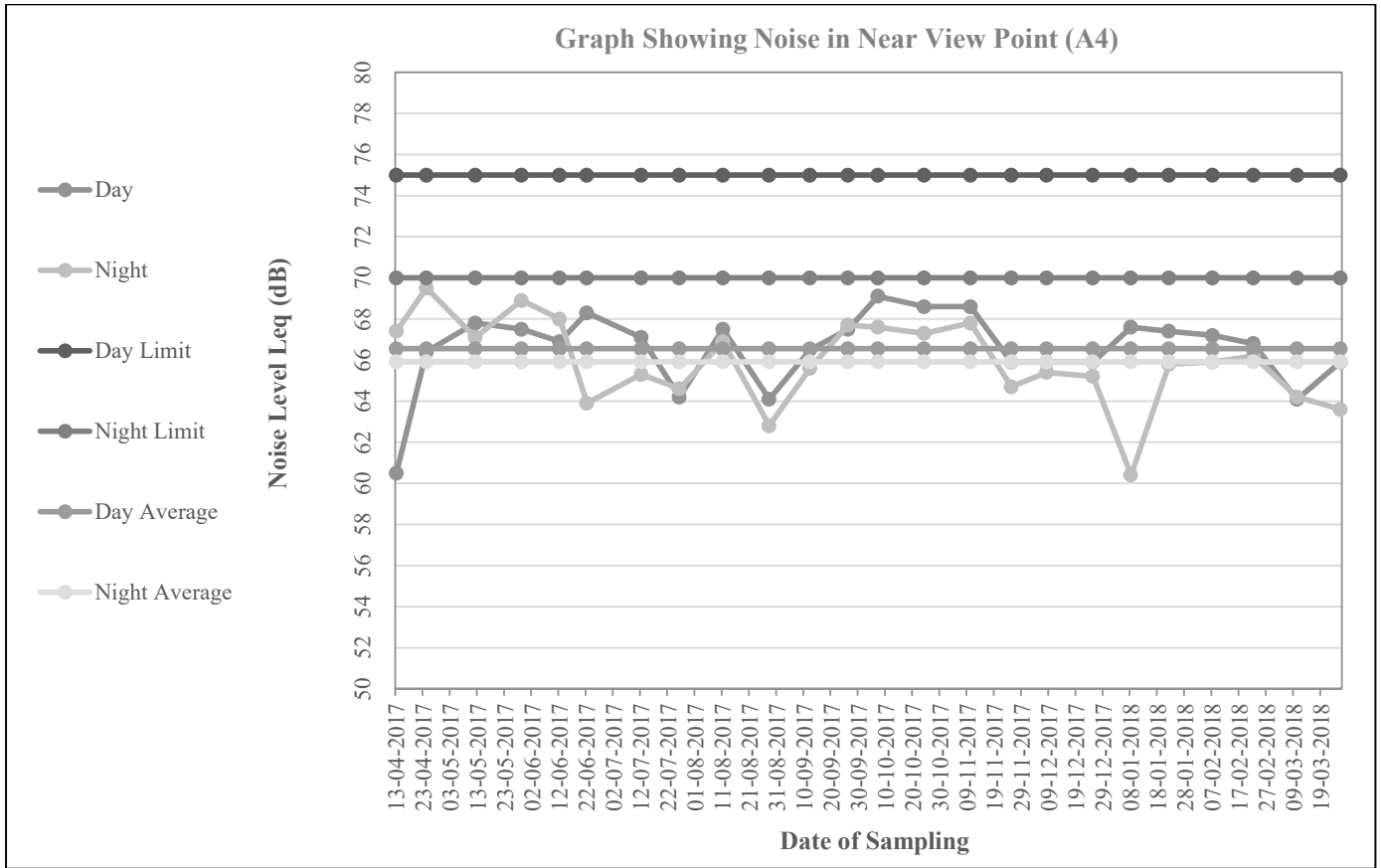


Table: 78

**Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Near West Sump(A3)**

DATE OF SAMPLING	DAY	NIGHT
13/04/2017	64.5	65.3
24/04/2017	66.6	65.4
12/05/2017	66.5	65.8
29/05/2017	66.8	65.8
12/06/2017	67.3	69.2
22/06/2017	66.8	63.7
12/07/2017	65.8	64.2
26/07/2017	66.5	63.6
11/08/2017	64.7	65.8
28/08/2017	63.9	63.5
12/09/2017	65.1	63.9
26/09/2017	66.3	65.9
07/10/2017	68.5	68.3
24/10/2017	69.5	68.2
10/11/2017	67.5	66.9
25/11/2017	67.4	67.1
08/12/2017	67.5	64.7
25/12/2017	67.4	66.7
08/01/2018	65.4	62.3
22/01/2018	65.9	64.7
07/02/2018	65.6	65.3
22/02/2018	67.4	65.9
10/03/2018	65.1	63.4
26/03/2018	67.5	64.8
Brief Statistic (in dB)	Day	Night
Minimum	63.9	62.3
Maximum	69.5	69.2
Mean	66.5	65.4
Noise Standard	75	70

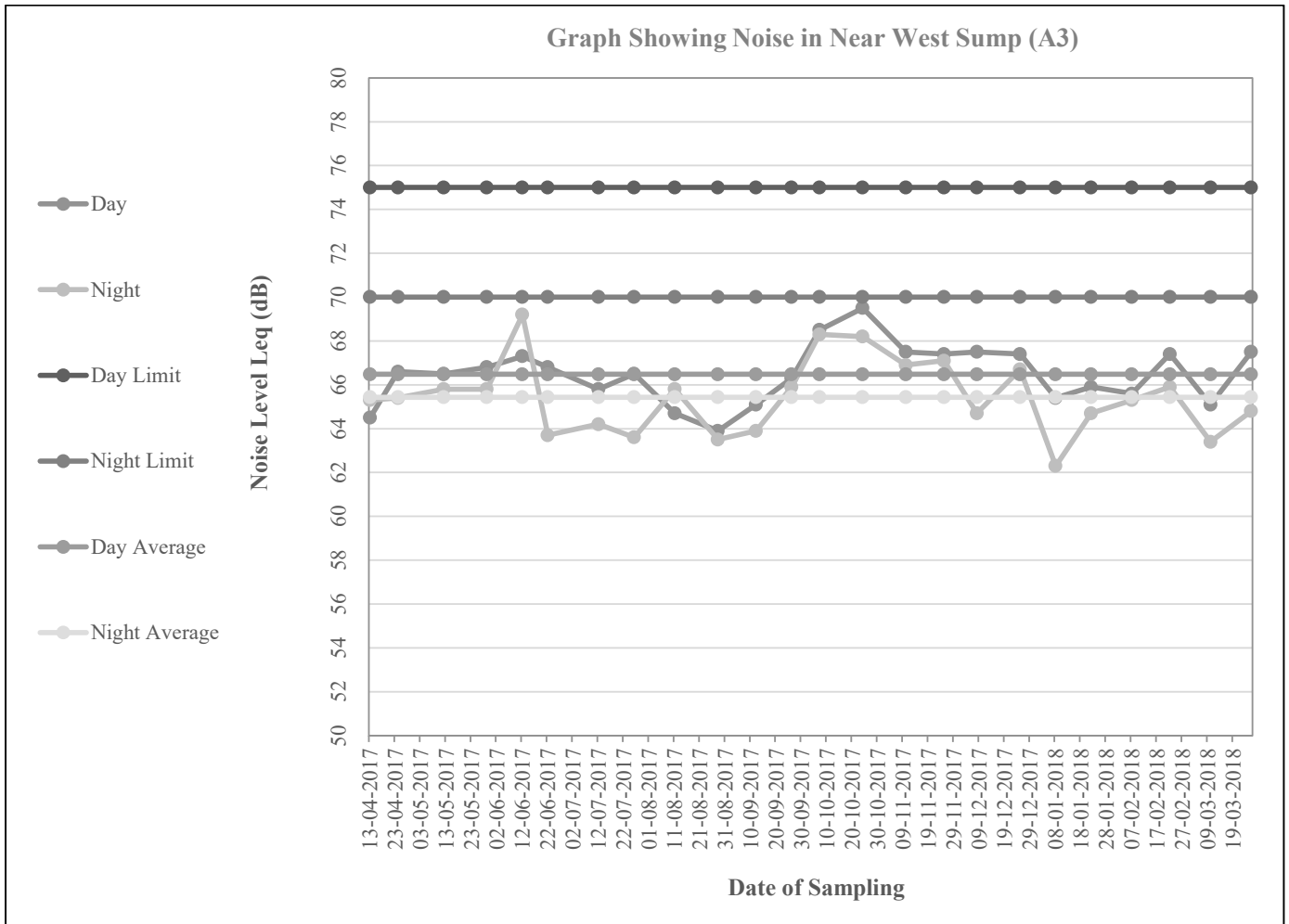


Table: 79

**Area: Jagannath
 Project: Bhubaneswari OCP
 Monitoring Station: B.C.M.L Workshop**

DATE OF SAMPLING	DAY	NIGHT
22/04/2017	58.4	62.3
10/05/2017	62.2	58.6
25/05/2017	63	62.3
12/06/2017	62.5	60.5
22/06/2017	63.2	60.3
13/07/2017	63.5	62.2
27/07/2017	63.6	60.5
10/08/2017	59.6	60.4
25/08/2017	62.4	60.2
11/09/2017	60.9	61.4
25/09/2017	62.9	60.5
12/10/2017	62.7	60.8
25/10/2017	62.6	60.8
09/11/2017	63.4	61.5
24/11/2017	61.3	60.5
07/12/2017	62.1	60.7
22/12/2017	63.1	61.9
05/01/2018	62.3	57.4
19/01/2018	63.1	59.5
05/02/2018	62.1	60.3
20/02/2018	63.7	61.5
08/03/2018	63.5	60.9
23/03/2018	63.4	61.9
Brief Statistic (in dB)	Day	Night
Minimum	58.4	57.4
Maximum	63.7	62.3
Mean	62.4	60.7
Noise Standard	75	70

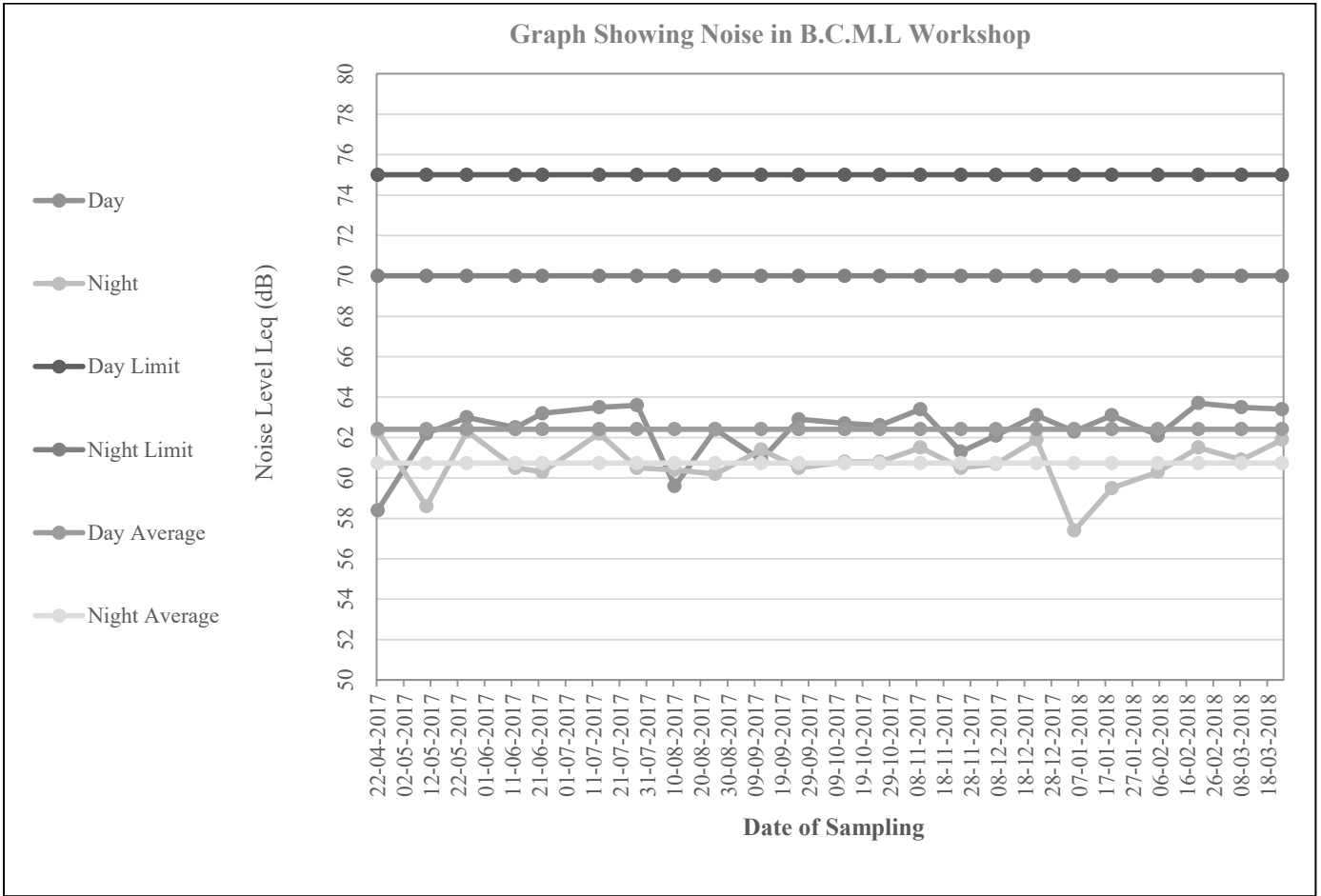


Table: 80

**Area: Jagannath
 Project: Bhubaneswari OCP
 Monitoring Station: Near External OB Dump**

DATE OF SAMPLING	DAY	NIGHT
22/04/2017	56.5	61.9
10/05/2017	60.2	58.2
25/05/2017	62.1	59.7
12/06/2017	59.4	56.9
22/06/2017	61.3	59.8
12/07/2017	61.4	57.5
26/07/2017	61.4	58.6
10/08/2017	59.4	59.3
25/08/2017	59.8	65.9
11/09/2017	60.1	59.0
25/09/2017	59.7	57.4
12/10/2017	60.2	57.5
25/10/2017	60.6	58.6
09/11/2017	61.3	59.2
24/11/2017	60.9	58.7
07/12/2017	60.3	57.5
22/12/2017	61.4	58.5
05/01/2018	60.5	58.4
19/01/2018	61.3	57.9
05/02/2018	60.8	58.6
20/02/2018	61.4	57.3
08/03/2018	60.4	57.2
23/03/2018	60.2	57.2
Brief Statistic (in dB)	Day	Night
Minimum	56.5	56.9
Maximum	62.1	65.9
Mean	60.5	58.7
Noise Standard	75	70

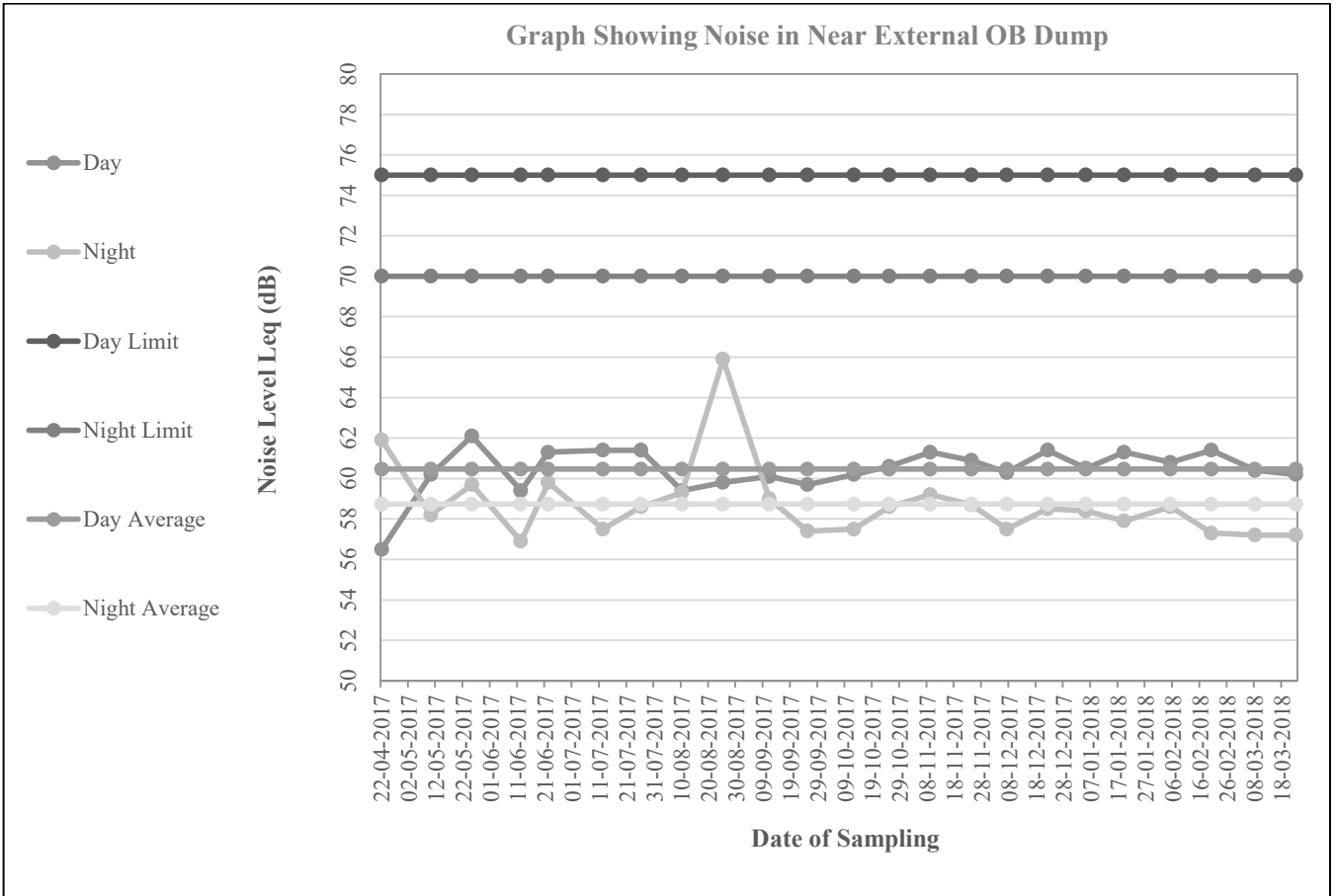


Table: 81

Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: S-E of Mine

DATE OF SAMPLING	DAY	NIGHT
22/04/2017	67.8	64.1
10/05/2017	64.8	67.4
25/05/2017	67.2	65.4
12/06/2017	63.9	65.7
22/06/2017	65.7	66.9
13/07/2017	63.8	61.5
27/07/2017	68.7	65
10/08/2017	65.7	65.8
25/08/2017	65.7	66.3
11/09/2017	64.6	65.3
25/09/2017	65.7	67.6
12/10/2017	65.9	64.7
25/10/2017	64.5	63.2
09/11/2017	66.2	65.7
24/11/2017	63.7	64.5
08/12/2017	65.2	63.8
25/12/2017	64.7	64.1
08/01/2018	62.5	48.6
22/01/2018	63.7	63.1
05/02/2018	64.2	63.9
20/02/2018	65.7	63.9
08/03/2018	63.9	63.1
26/03/2018	62.9	60.5
Brief Statistic (in dB)	Day	Night
Minimum	62.5	48.6
Maximum	68.7	67.6
Mean	65.1	63.9
Noise Standard	75	70

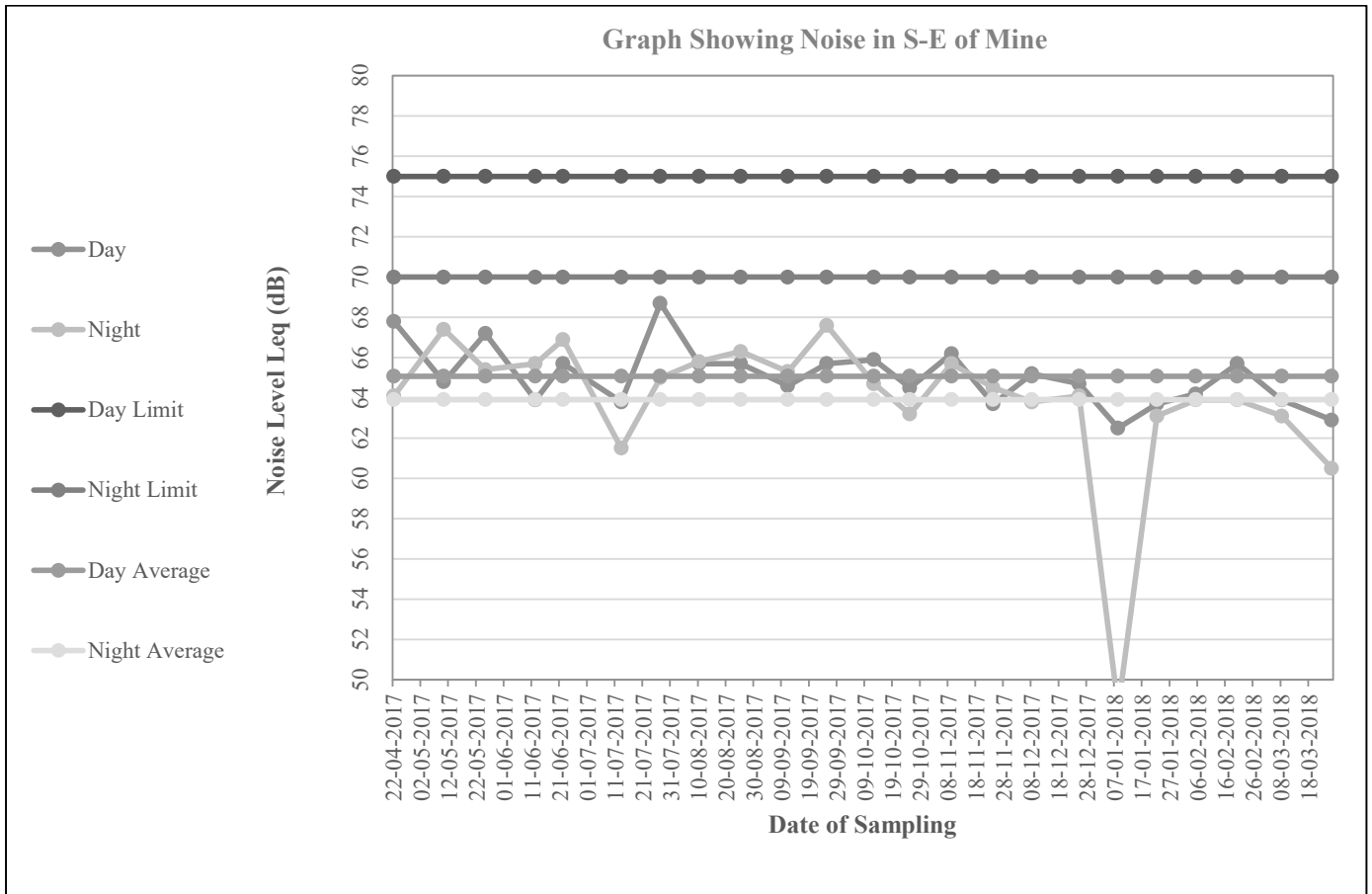


Table: 82

**Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: N-E of Mine**

DATE OF SAMPLING	DAY	NIGHT
22/04/2017	69.3	61.9
10/05/2017	68.7	66.5
25/05/2017	66.5	65.8
12/06/2017	65.7	67.2
22/06/2017	65.8	64.9
12/07/2017	65.7	63.8
26/07/2017	65.7	63.5
10/08/2017	64.6	63.9
25/08/2017	64.9	64.7
11/09/2017	65.3	67.8
25/09/2017	67.2	66.3
09/10/2017	67.1	65.7
25/10/2017	66.6	65.8
09/11/2017	64.9	65.3
24/11/2017	65.4	65.2
08/12/2017	64.7	62.1
25/12/2017	63.6	62.8
08/01/2018	60.9	52.2
22/01/2018	64.3	62.4
05/02/2018	63.7	62.5
20/02/2018	64.2	62.5
08/03/2018	64.2	62.7
23/03/2018	63.5	61.7
Brief Statistic (in dB)	Day	Night
Minimum	60.9	52.2
Maximum	69.3	67.8
Mean	65.3	63.8
Noise Standard	75	70

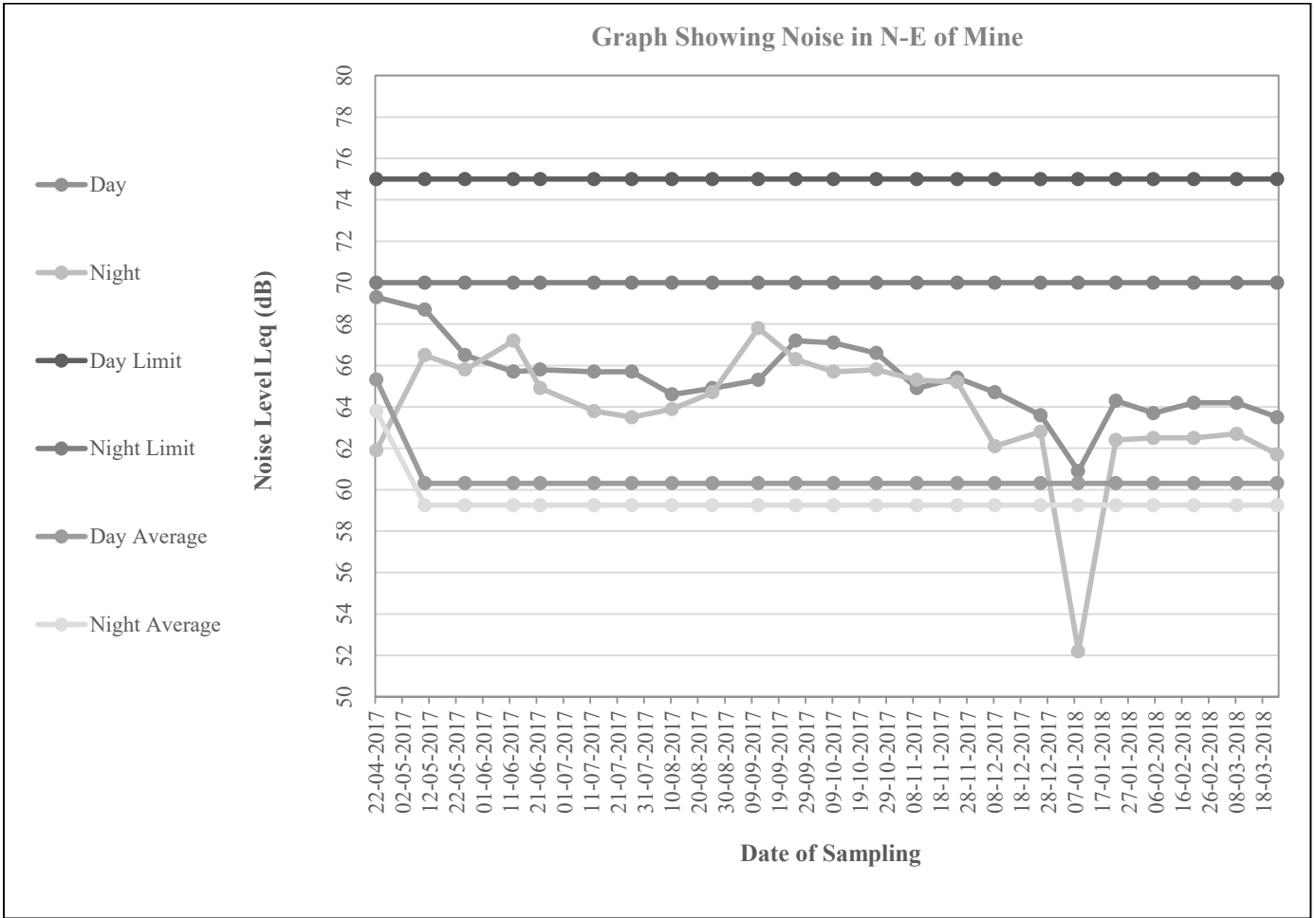


Table: 83

Area: Bharatpur

Project: Bharatpur OCP

Monitoring Station: Near Civil Maintenance Office of Kalinga Colony/PF

DATE OF SAMPLING	DAY	NIGHT
15-04-2017	61.0	58.4
21-04-2017	62.2	60.4
04-05-2017	61.2	60.1
18-05-2017	63.9	57.5
09-06-2017	61.3	60.2
21-06-2017	60.3	61.2
07-07-2017	61.2	58.5
21-07-2017	60.8	58.6
07-08-2017	62.2	59.4
22-08-2017	60.2	61.2
06-09-2017	60.5	58.7
22-09-2017	60.5	58.9
07-10-2017	59.4	56.8
21-10-2017	60.5	61.0
09-11-2017	63.2	61.7
24-11-2017	61.4	60.1
07-12-2017	62.7	58.3
22-12-2017	62.7	60.5
05-01-2018	62.7	55.8
19-01-2018	62.9	60.2
07-02-2018	62.5	60.2
22-02-2018	62.9	60.1
10-03-2018	30.2	56.9
26-03-2018	61.2	57.4
Brief Statistic (in dB)	Day	Night
Minimum	30.2	55.8
Maximum	63.9	61.7
Mean	60.3	59.3
Noise Standard	75	70

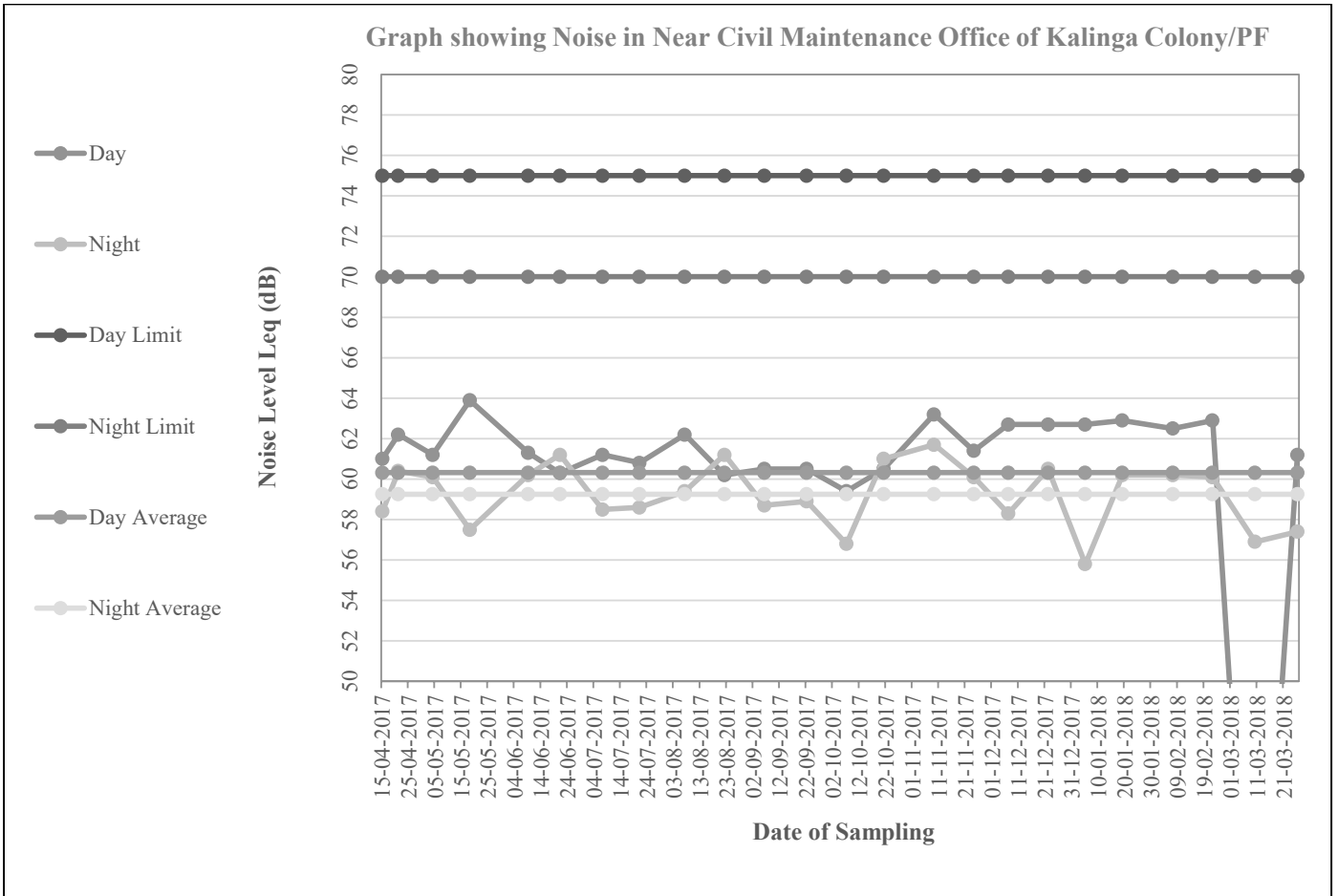


Table: 84

**Area: Bharatpur
 Project: Bharatpur OCP
 Monitoring Station: Padmabatipur Village**

DATE OF SAMPLING	DAY	NIGHT
15-04-2017	59.5	56.8
21-04-2017	59.0	59.3
04-05-2017	59.7	59.5
18-05-2017	59.8	56.5
09-06-2017	59.8	58.7
21-06-2017	59.1	57.3
07-07-2017	59.7	56.9
21-07-2017	64.0	61.0
07-08-2017	59.8	58.8
22-08-2017	61.2	58.7
06-09-2017	61.1	59.2
22-09-2017	61.2	59.4
11-10-2017	59.5	57.4
16-10-2017	59.1	53.9
02-11-2017	62.1	59.5
17-11-2017	60.3	57.9
04-12-2017	60.4	59.3
19-12-2017	62.4	60.2
06-01-2018	60.2	59.1
15-01-2018	62.5	59.9
02-02-2018	60.2	59.1
17-02-2018	60.3	57.8
04-03-2018	62.4	60.9
19-03-2018	60.6	57.9
Brief Statistic (in dB)	Day	Night
Minimum	59.0	53.9
Maximum	64.0	61.0
Mean	60.6	58.5
Noise Standard	75	70

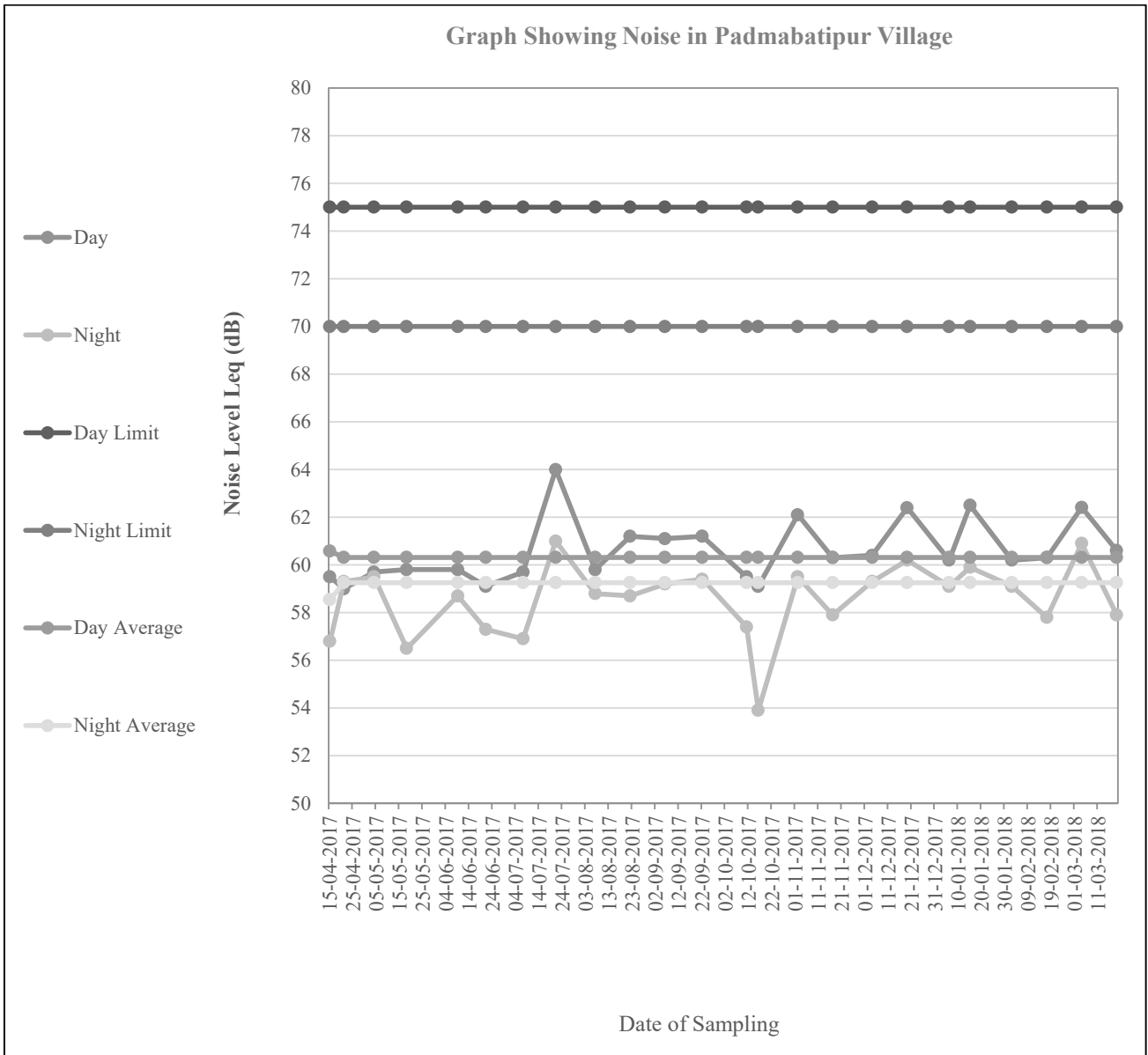


Table: 84

**Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Project Office, Balram OCP**

DATE OF SAMPLING	DAY	NIGHT
15-04-2017	66.0	67.8
19-04-2017	67.2	62.7
04-05-2017	64.8	63.3
18-05-2017	64.3	63.1
09-06-2017	64.7	65.2
21-06-2017	65.2	62.6
07-07-2017	65.3	62.8
21-07-2017	65.3	62.4
04-08-2017	65.8	66.7
21-08-2017	65.1	62.6
05-09-2017	65.2	63.7
21-09-2017	66.3	67.1
06-10-2017	68.4	65.9
23-10-2017	64.2	62.7
02-11-2017	65.8	64.7
17-11-2017	63.8	63.2
02-12-2017	65.3	64.9
16-12-2017	65.7	64.5
06-01-2018	64.7	57.2
20-01-2018	63.9	62.5
07-02-2018	64.2	62.5
22-02-2018	63.9	63.2
10-03-2018	64.3	62.7
26-03-2018	64.2	61.7
Brief Statistic (in dB)	Day	Night
Minimum	63.8	57.2
Maximum	68.4	67.8
Mean	65.2	63.6
Noise Standard	75	70

Table: 85

Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: On backfill, Near Reject Dumpyard

DATE OF SAMPLING	DAY	NIGHT
21-04-2017	65.4	67.1
04-05-2017	67.2	68.5
18-05-2017	68.5	67.9
09-06-2017	68.5	68.9
21-06-2017	67.0	65.9
07-07-2017	67.8	65.7
21-07-2017	69.4	64.5
07-08-2017	67.9	67.2
22-08-2017	66.9	67.5
06-09-2017	67.4	65.9
22-09-2017	67.4	67.2
07-10-2017	58.6	57.4
23-10-2017	66.7	67.8
03-11-2017	67.8	67.2
17-11-2017	67.5	67.6
06-12-2017	67.5	66.9
21-12-2017	67.9	65.7
05-01-2018	67.5	60.8
19-01-2018	67.8	65.8
02-02-2018	65.9	65.3
17-02-2018	66.7	66.2
04-03-2018	67.3	65.4
19-03-2018	65.8	64.3
Brief Statistic (in dB)	Day	Night
Minimum	58.6	57.4
Maximum	69.4	68.9
Mean	67.0	65.9
Noise Standard	75	70

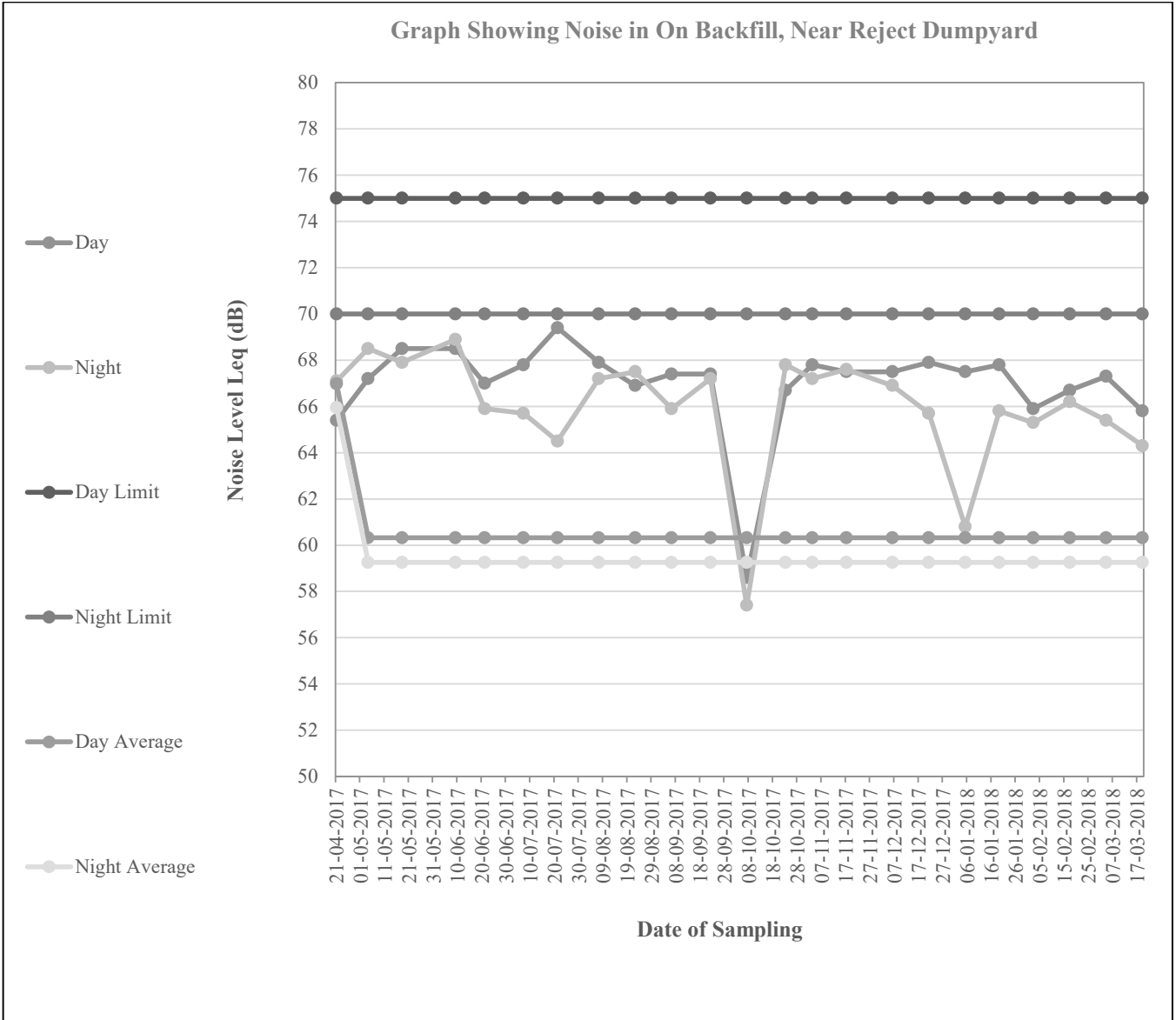


Table: 86

Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Near View point (A4)

DATE OF SAMPLING	DAY	NIGHT
13-04-2017	60.5	67.4
24-04-2017	66.4	69.5
12-05-2017	67.8	67.1
29-05-2017	67.5	68.9
12-06-2017	66.9	68.0
22-06-2017	68.3	63.9
12-07-2017	67.1	65.3
26-07-2017	64.2	64.6
11-08-2017	67.5	66.9
28-08-2017	64.1	62.8
12-09-2017	66.5	65.6
26-09-2017	67.5	67.7
07-10-2017	69.1	67.6
24-10-2017	68.6	67.3
10-11-2017	68.6	67.8
25-11-2017	65.9	64.7
08-12-2017	65.9	65.4
25-12-2017	65.9	65.2
08-01-2018	67.6	60.4
22-01-2018	67.4	65.8
07-02-2018	67.2	65.9
22-02-2018	66.8	66.2
10-03-2018	64.1	64.2
26-03-2018	65.9	63.6
Brief Statistic (in dB)	Day	Night
Minimum	60.5	60.4
Maximum	69.1	69.5
Mean	66.6	65.9
Noise Standard	75	70

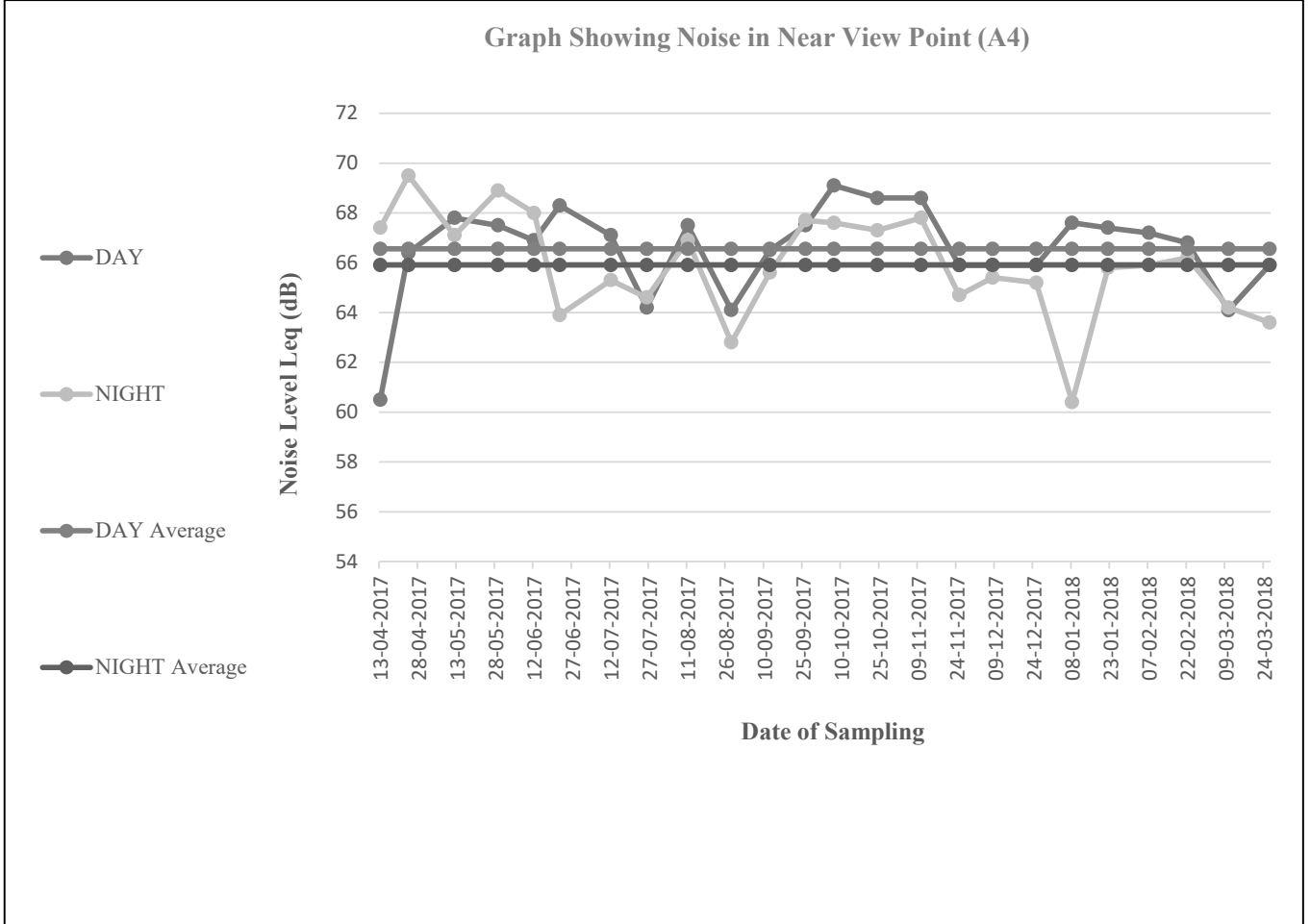


Table: 87

Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Ananta Expansion Area (A1)

DATE OF SAMPLING	DAY	NIGHT
14-04-2017	64.5	57.4
25-04-2017	66.3	63.2
11-05-2017	66.1	67.9
26-05-2017	67.2	65.4
13-06-2017	68.1	67.4
26-06-2017	66.7	67.1
13-07-2017	65.4	64.8
27-07-2017	64.9	63.3
11-08-2017	67.7	65.7
28-08-2017	63.5	62.9
12-09-2017	64.3	65.8
26-09-2017	67.4	64.8
12-10-2017	65.2	64.9
25-10-2017	65.3	64.5
11-11-2017	65.9	66.2
27-11-2017	64.8	63.7
13-12-2017	67.3	65.7
28-12-2017	65.3	64.6
11-01-2018	65.9	66.4
27-01-2018	65.2	65.0
10-02-2018	64.7	64.1
25-02-2018	63.5	64.2
14-03-2018	64.7	63.2
29-03-2018	64.9	64.2
Brief Statistic (in dB)	Day	Night
Minimum	63.5	57.4
Maximum	68.1	67.9
Mean	65.6	64.7
Noise Standard	75	70

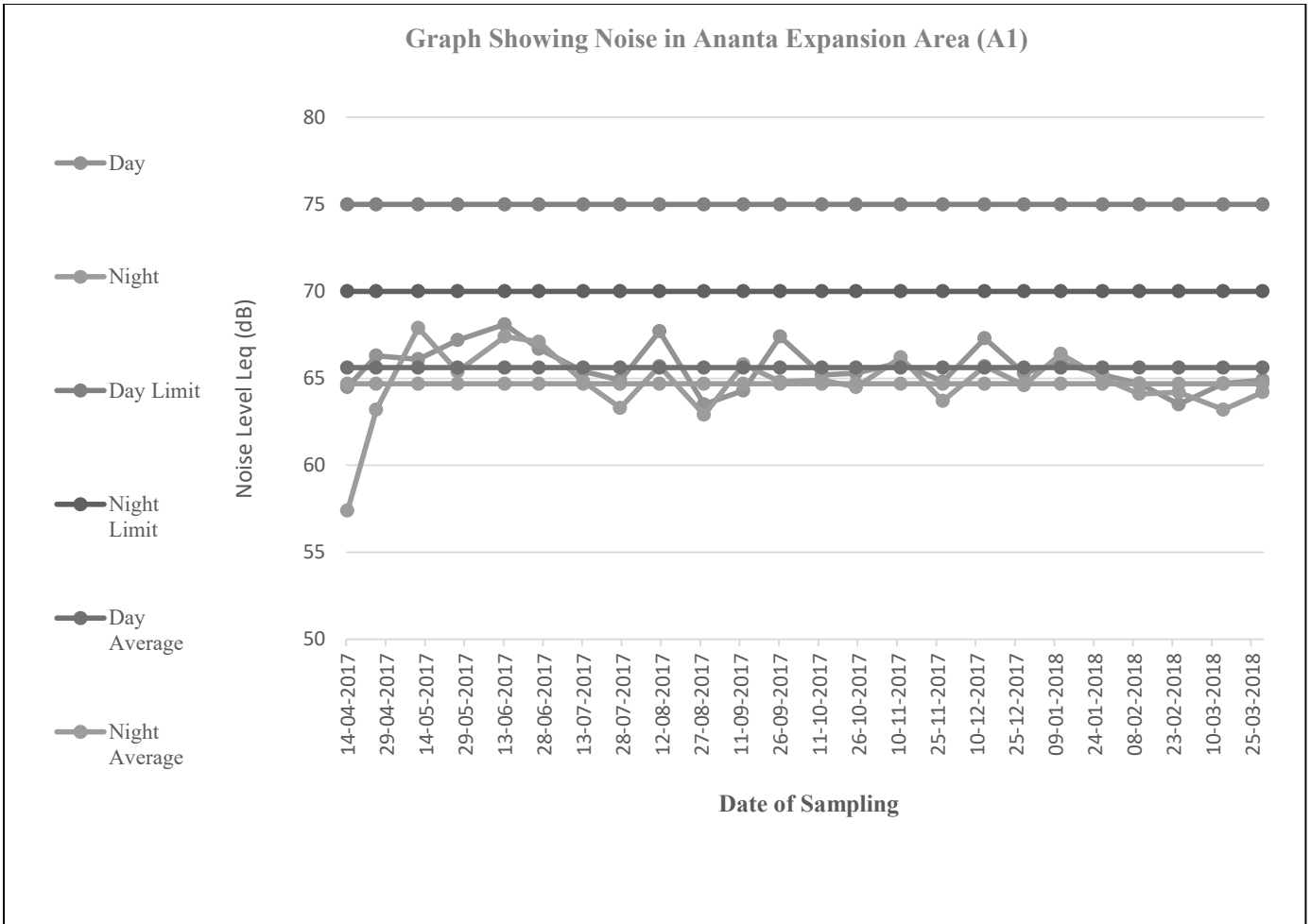


Table: 88

Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Near Ananta OC Project Office (A3)

DATE OF SAMPLING	DAY	NIGHT
13/04/2017	65.5	66.4
25/04/2017	66.9	65.8
11/05/2017	65.4	65.7
26/05/2017	66.3	64.8
13/06/2017	65.6	63.9
26/06/2017	63.8	62.5
13/07/2017	63.9	64.3
27/07/2017	62.8	62.7
11/08/2017	64.2	64.7
28/08/2017	63.2	61.4
12/09/2017	65.4	63.9
26/09/2017	64.9	62.9
12/10/2017	66.4	64.2
25/10/2017	65.2	64.1
11/11/2017	64	63.9
27/11/2017	63.9	63.5
13/12/2017	63.9	63.5
28/12/2017	62.5	60.7
11/01/2018	65.6	64.2
27/01/2018	63.8	63.2
10/02/2018	62.7	61.9
25/02/2018	62.8	61.2
14/03/2018	63.7	62.4
29/03/2018	63.4	61.4
Brief Statistic (in dB)	Day	Night
Minimum	62.5	60.7
Maximum	66.9	66.4
Mean	64.4	63.5
Noise Standard	75	70

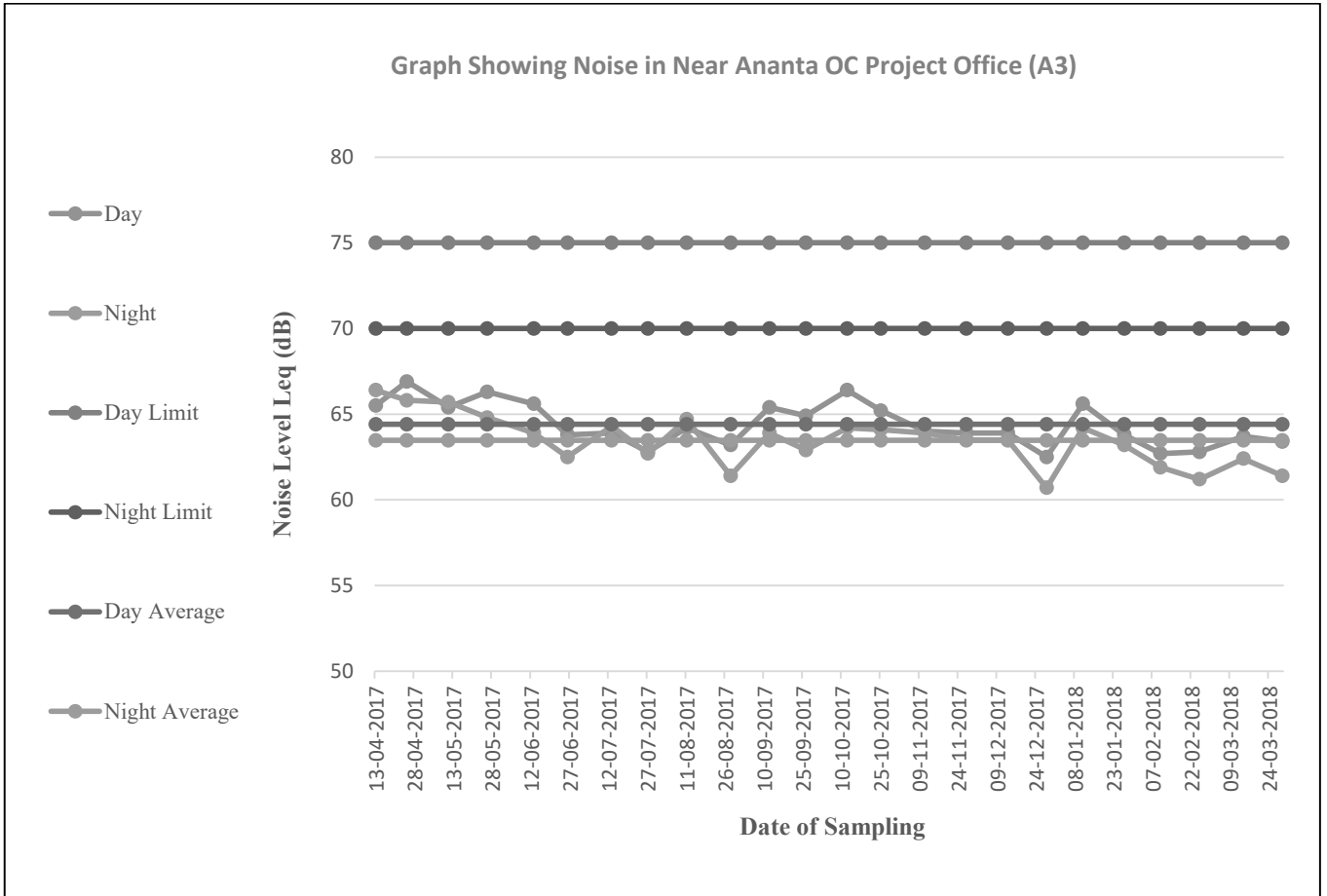


Table: 89

**Area: Bharatpur
Project: Ananta OCP**

Monitoring Station: Near Talcher West Underground (A2)

DATE OF SAMPLING	DAY	NIGHT
13/04/2017	63.0	64.6
25/04/2017	69.0	65.4
11/05/2017	67.0	66
26/05/2017	66.0	66.2
13/06/2017	66.0	65.7
26/06/2017	66.0	66.8
13/07/2017	64.0	63.8
27/07/2017	67.0	65.2
11/08/2017	64.0	64.2
28/08/2017	65.0	64.1
12/09/2017	66.0	63.5
26/09/2017	66.0	65.0
12/10/2017	69.0	65.8
25/10/2017	69.0	65.8
11/11/2017	65.0	64.1
27/11/2017	66.0	65.2
13/12/2017	65.0	64.2
28/12/2017	64.0	63.2
11/01/2018	65.0	64.9
27/01/2018	65.0	63.7
10/02/2018	64.0	63.2
25/02/2018	64.0	62.7
14/03/2018	65.0	63.9
29/03/2018	65.0	63.7
Brief Statistic (in dB)	Day	Night
Minimum	63.0	62.7
Maximum	69.	66.8
Mean	65.6	64.6
Noise Standard	75	70

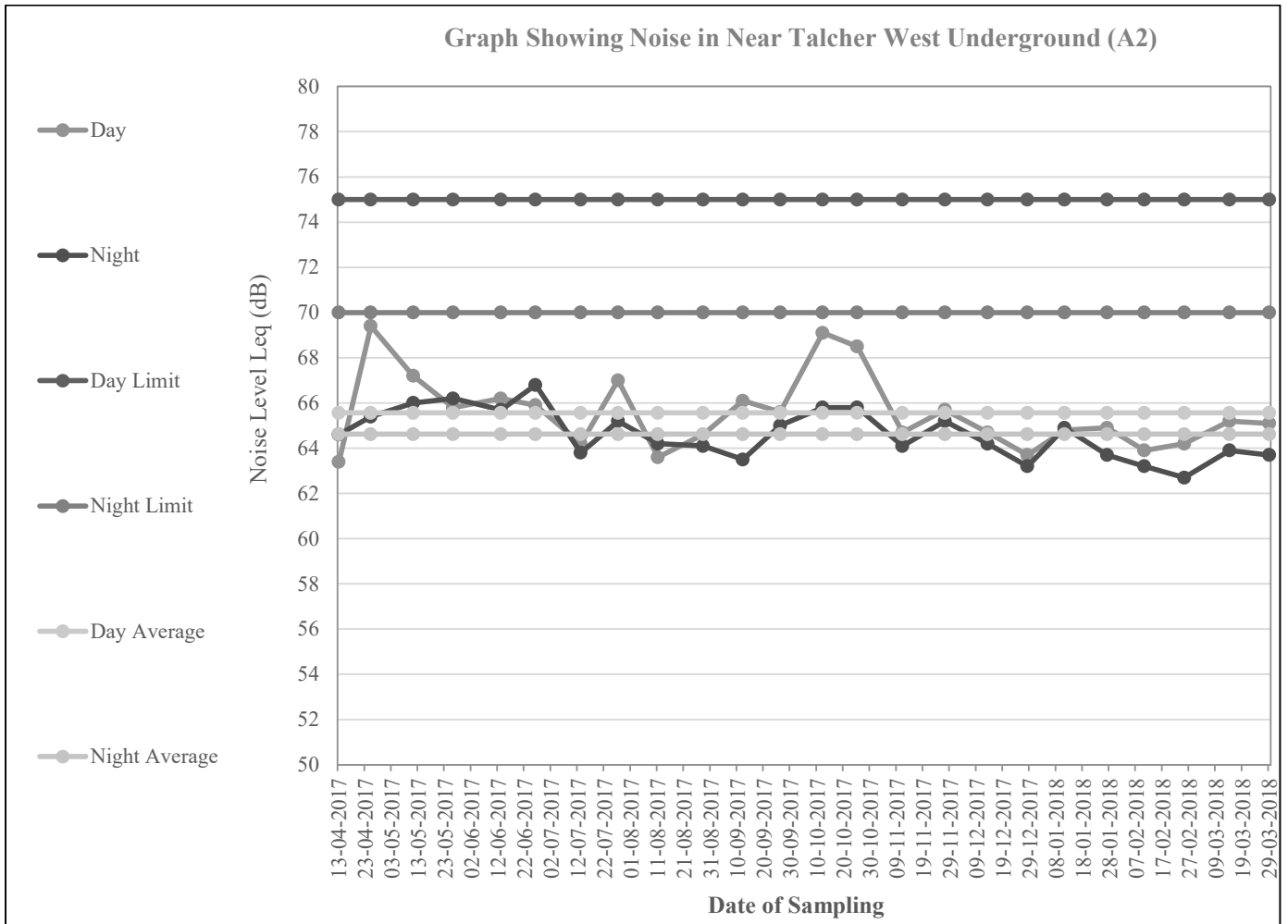


Table:

Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Ananta Vihar Colony

DATE OF SAMPLING	DAY	NIGHT
14/04/2017	56	54.8
25/04/2017	61	59.1
11/05/2017	58	56.8
26/05/2017	61	59
13/06/2017	61	58.9
26/06/2017	62	57.2
13/07/2017	62	60.6
27/07/2017	61	60.4
11/08/2017	61	57.5
28/08/2017	62	57.2
12/09/2017	60	58.7
26/09/2017	60	57.4
07/10/2017	61	58.6
23/10/2017	62	57.1
04/11/2017	62	58.2
18/11/2017	60	57.9
02/12/2017	60	57.2
16/12/2017	61	58.9
06/01/2018	63	61.3
20/01/2018	63	60.3
10/02/2018	60	58.5
25/02/2018	61	59.3
14/03/2018	61	56.8
29/03/2018	60	58.3
Brief Statistic (in dB)	Day	Night
Minimum	56	54.8
Maximum	63	61.3
Mean	60.8	58.3
Noise Standard	75	70

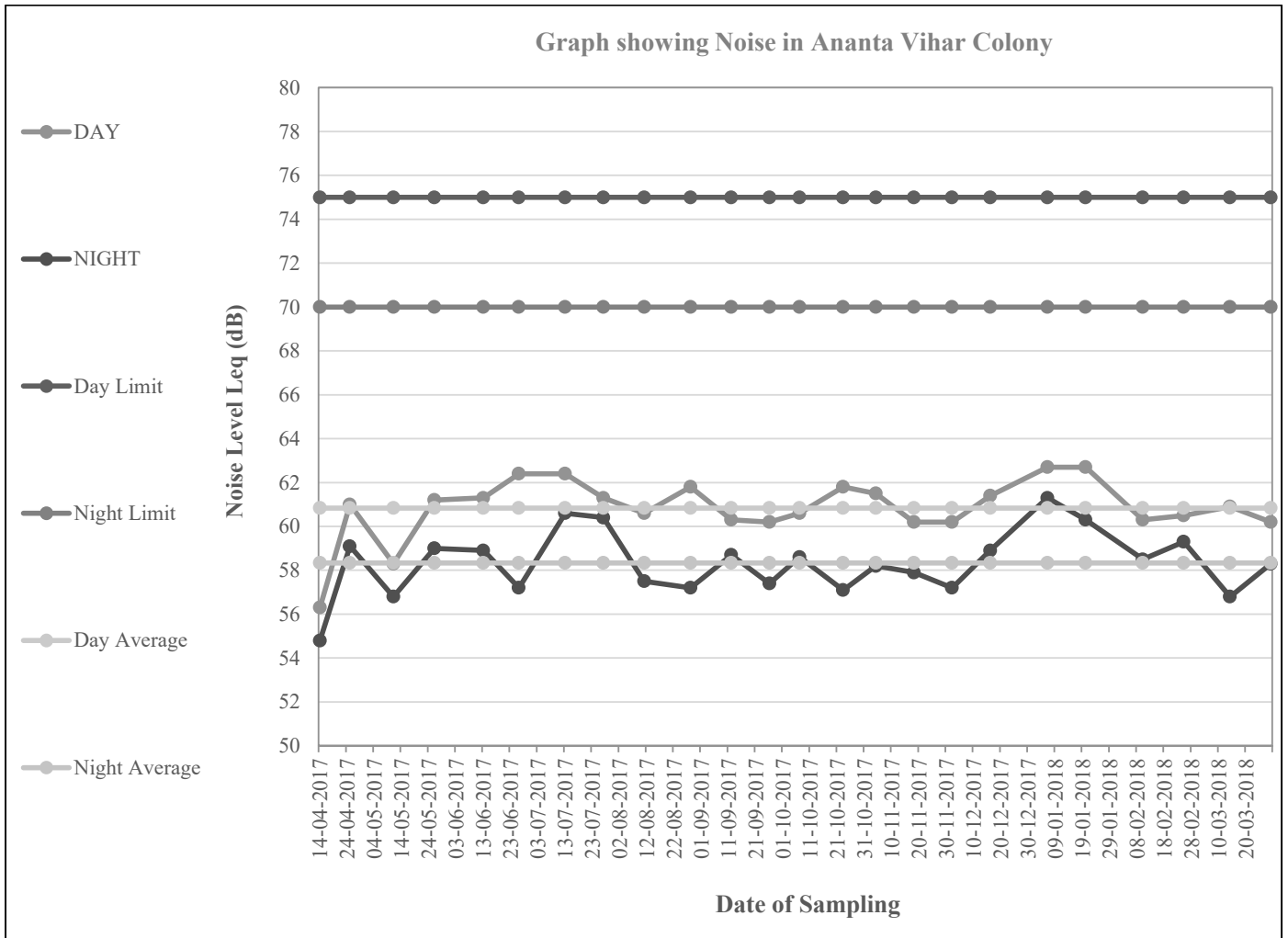


Table: 90

**Area: Bharatpur
 Project: Chhendipada OCP
 Monitoring Station: Near Mine Working**

DATE OF SAMPLING	DAY	NIGHT
20/04/2017	54.0	53.1
05/05/2017	59.0	51.2
19/05/2017	62.0	59.2
05/06/2017	62.0	59.5
19/06/2017	59.0	58.2
05/07/2017	57.0	54.3
19/07/2017	60.0	56.4
03/08/2017	59.0	57.9
18/08/2017	60.0	57.2
04/09/2017	59.0	57.9
20/09/2017	60.0	57.4
05/10/2017	61.0	59.9
20/10/2017	60.0	58.1
03/11/2017	61.0	59.3
20/11/2017	62.0	57.8
01/12/2017	62.0	60.1
18/12/2017	61.0	59.7
03/01/2018	62.0	60.5
17/01/2018	61.0	59.3
02/02/2018	61.0	58.6
17/02/2018	63.0	60.4
04/03/2018	61.0	57.9
19/03/2018	61.0	57.2
Brief Statistic (in dB)	Day	Night
Minimum	54.0	51.2
Maximum	63.0	60.5
Mean	60.3	57.9
Noise Standard	75	70

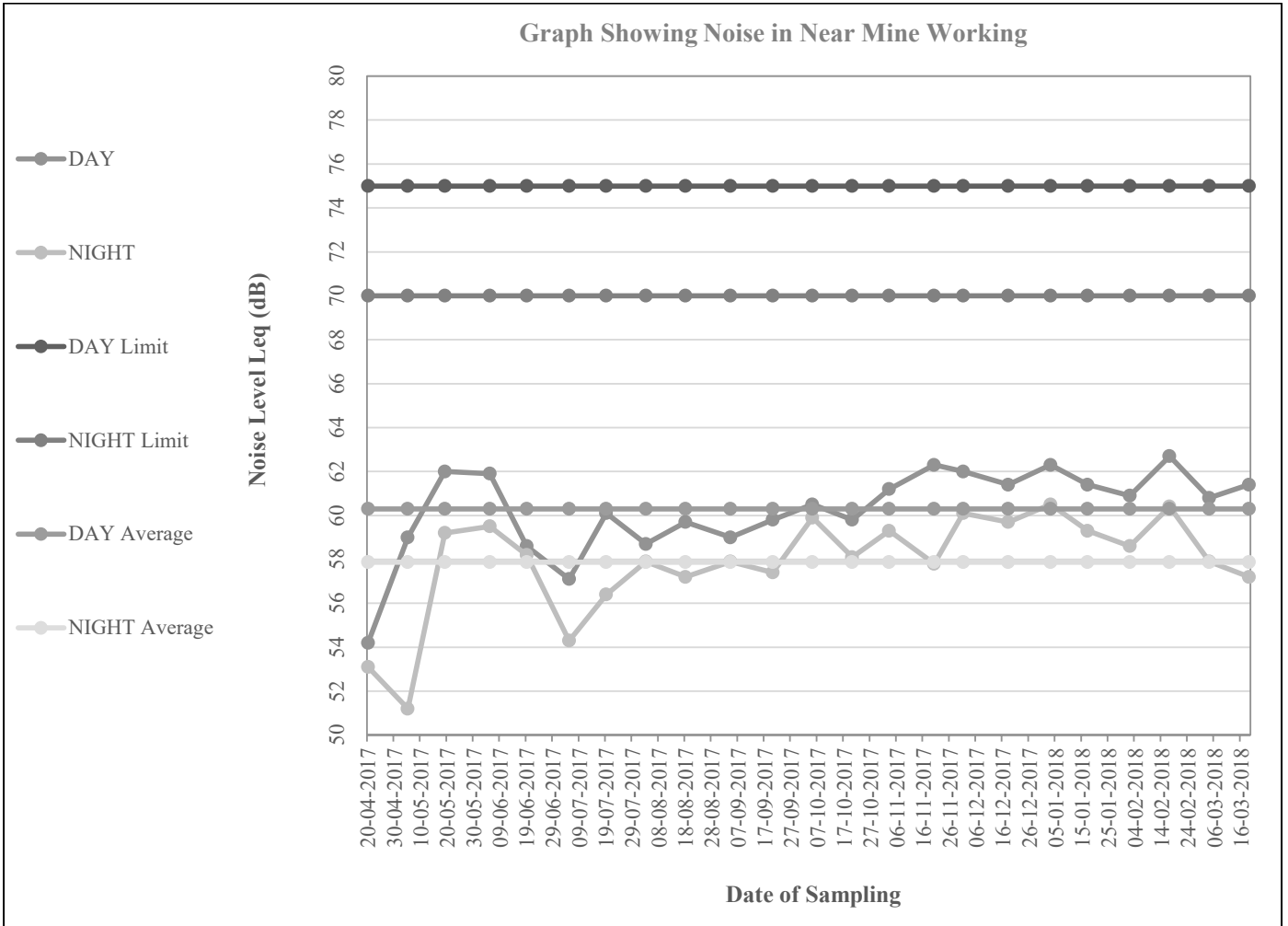


Table: 91

Area: Bharatpur
Project: Chhendipada OCP
Monitoring Station: Near Site Office

DATE OF SAMPLING	DAY	NIGHT
20/04/2017	57.0	52.0
05/05/2017	64.0	57.3
19/05/2017	62.0	59.3
05/06/2017	61.0	58.3
19/06/2017	61.0	57.9
05/07/2017	61.0	58.2
19/07/2017	62.0	59.6
03/08/2017	58.0	58.3
18/08/2017	60.0	59.5
04/09/2017	60.0	59.2
20/09/2017	60.0	58.2
05/10/2017	61.0	59.6
20/10/2017	60.0	59.3
03/11/2017	60.0	59.7
20/11/2017	62.0	59.4
01/12/2017	60.0	57.5
18/12/2017	60.0	56.9
03/01/2018	60.0	57.9
17/01/2018	60.0	57.2
02/02/2018	62.0	60.0
17/02/2018	61.0	59.2
04/03/2018	62.0	59.2
19/03/2018	62.0	59.3
Brief Statistic (in dB)	Day	Night
Minimum	57.0	52.0
Maximum	64.0	60.0
Mean	60.7	58.4
Noise Standard	75	70

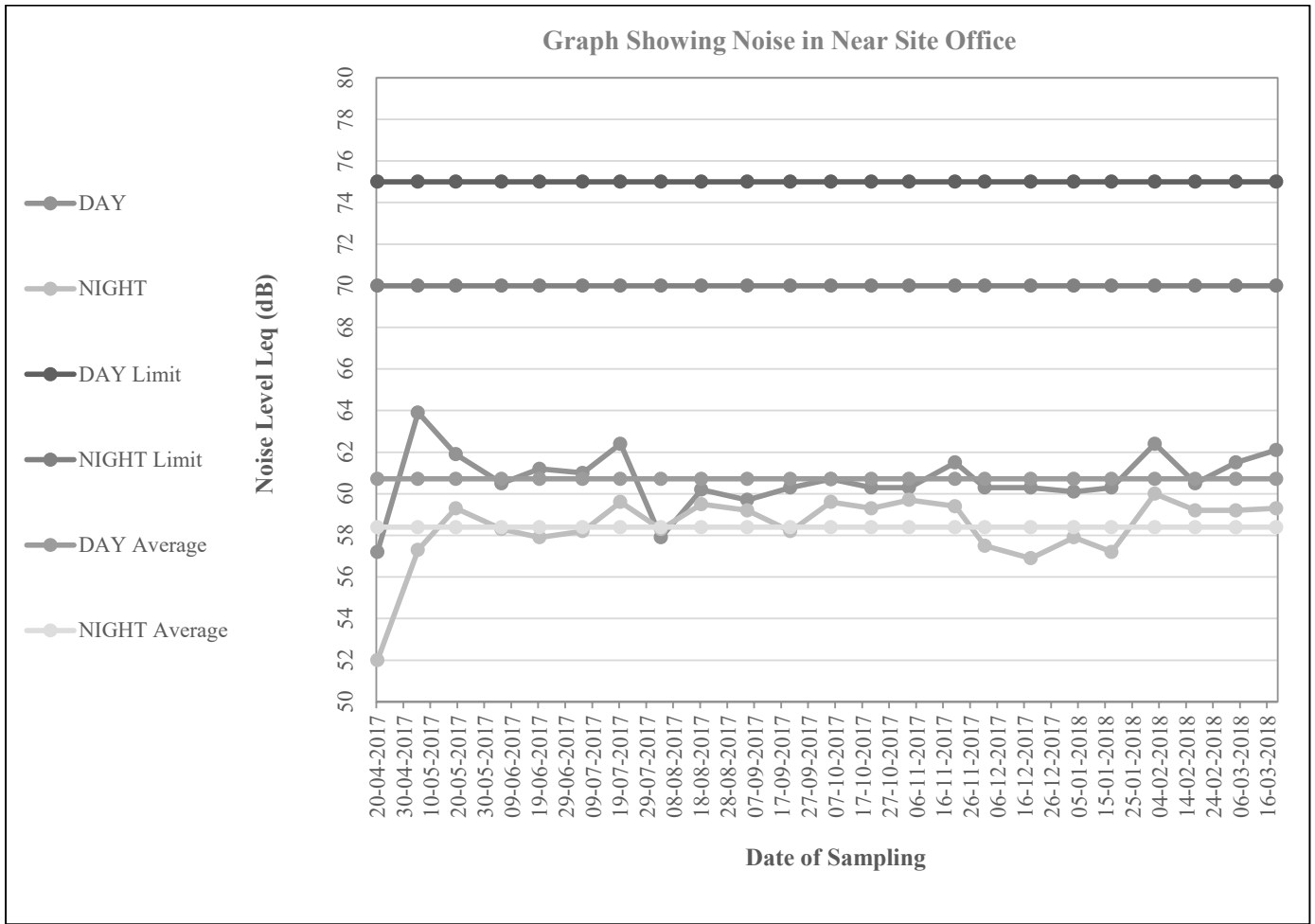


Table: 92

Area: Bharatpur
Project: Chhendipada OCP
Monitoring Station: Near Weigh Bridge

DATE OF SAMPLING	DAY	NIGHT
20/04/2017	63	57.4
05/05/2017	63	61.8
19/05/2017	64	61.2
05/06/2017	62	61.8
19/06/2017	63	60.3
05/07/2017	63	60.1
19/07/2017	63	61.6
03/08/2017	60	61.9
18/08/2017	62	58.6
04/09/2017	61	58.7
20/09/2017	63	61.9
05/10/2017	60	60
20/10/2017	62	60.3
03/11/2017	63	61.9
20/11/2017	64	61.3
01/12/2017	61	59.4
18/12/2017	63	60.2
03/01/2018	61	59.4
17/01/2018	61	56.5
02/02/2018	64	61.2
17/02/2018	64	60.7
04/03/2018	63	60.4
19/03/2018	61	56.9
Brief Statistic (in dB)	Day	Night
Minimum	60	56.5
Maximum	64	61.9
Mean	62.3	60.2
Noise Standard	75	70

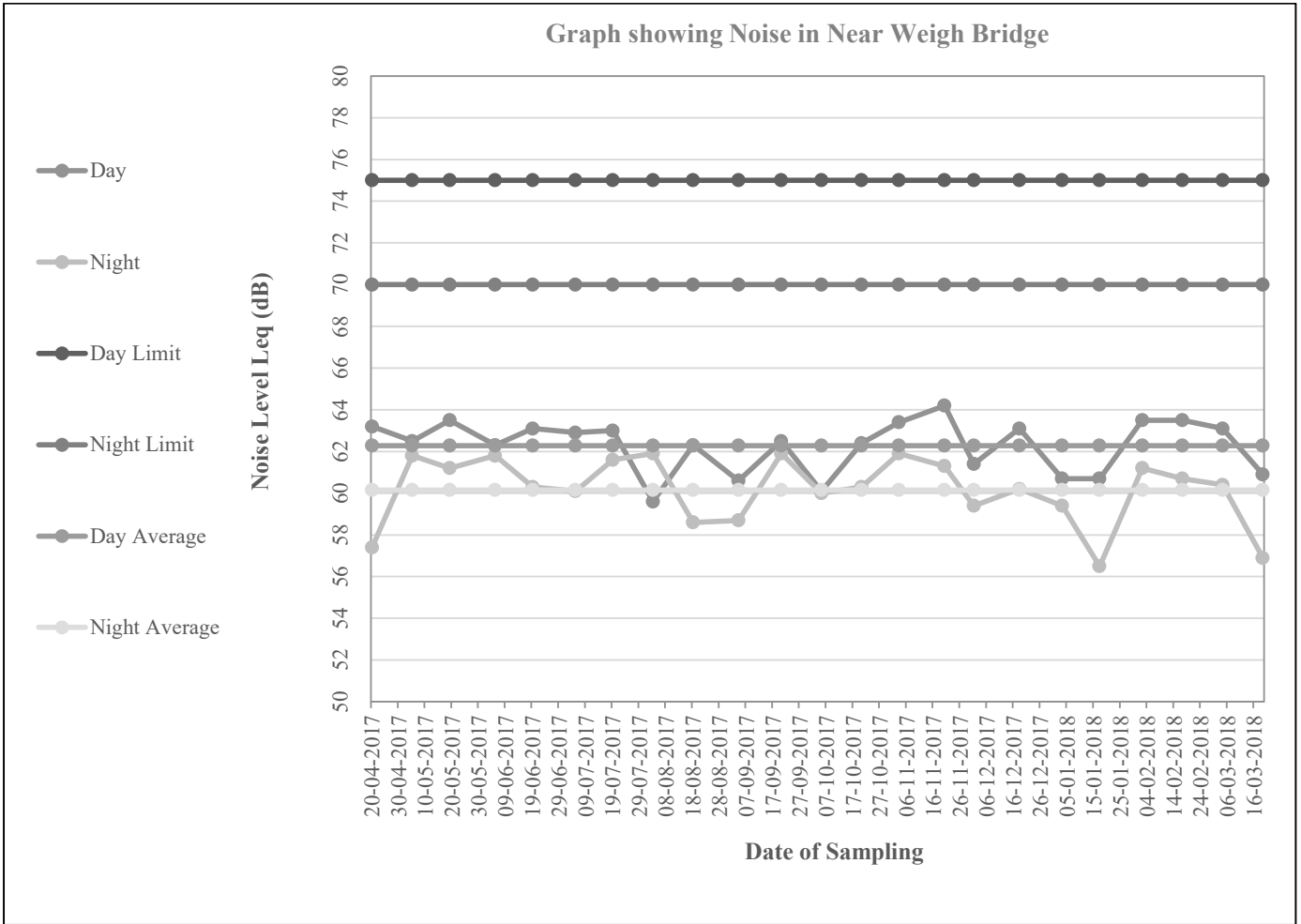


Table: 93

Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Lingraj CGM Office

DATE OF SAMPLING	DAY	NIGHT
21/04/2017	64	65.8
11/05/2017	65	63.5
26/05/2017	63	62.1
09/06/2017	64	62.8
21/06/2017	63	63.5
07/07/2017	64	61.9
21/07/2017	63	64.4
04/08/2017	62	63.7
21/08/2017	63	62
05/09/2017	66	61.5
21/09/2017	64	62.4
05/10/2017	63	62.3
21/10/2017	63	62.1
04/11/2017	65	63.8
18/11/2017	64	62.8
02/12/2017	64	61.8
16/12/2017	64	63.2
06/01/2018	64	57.4
20/01/2018	64	61.7
07/02/2018	64	62.9
22/02/2018	65	62.6
10/03/2018	63	60.9
26/03/2018	63	60.2
Brief Statistic (in dB)	Day	Night
Minimum	62	57.4
Maximum	66	65.8
Mean	63.6	62.4
Noise Standard	75	70

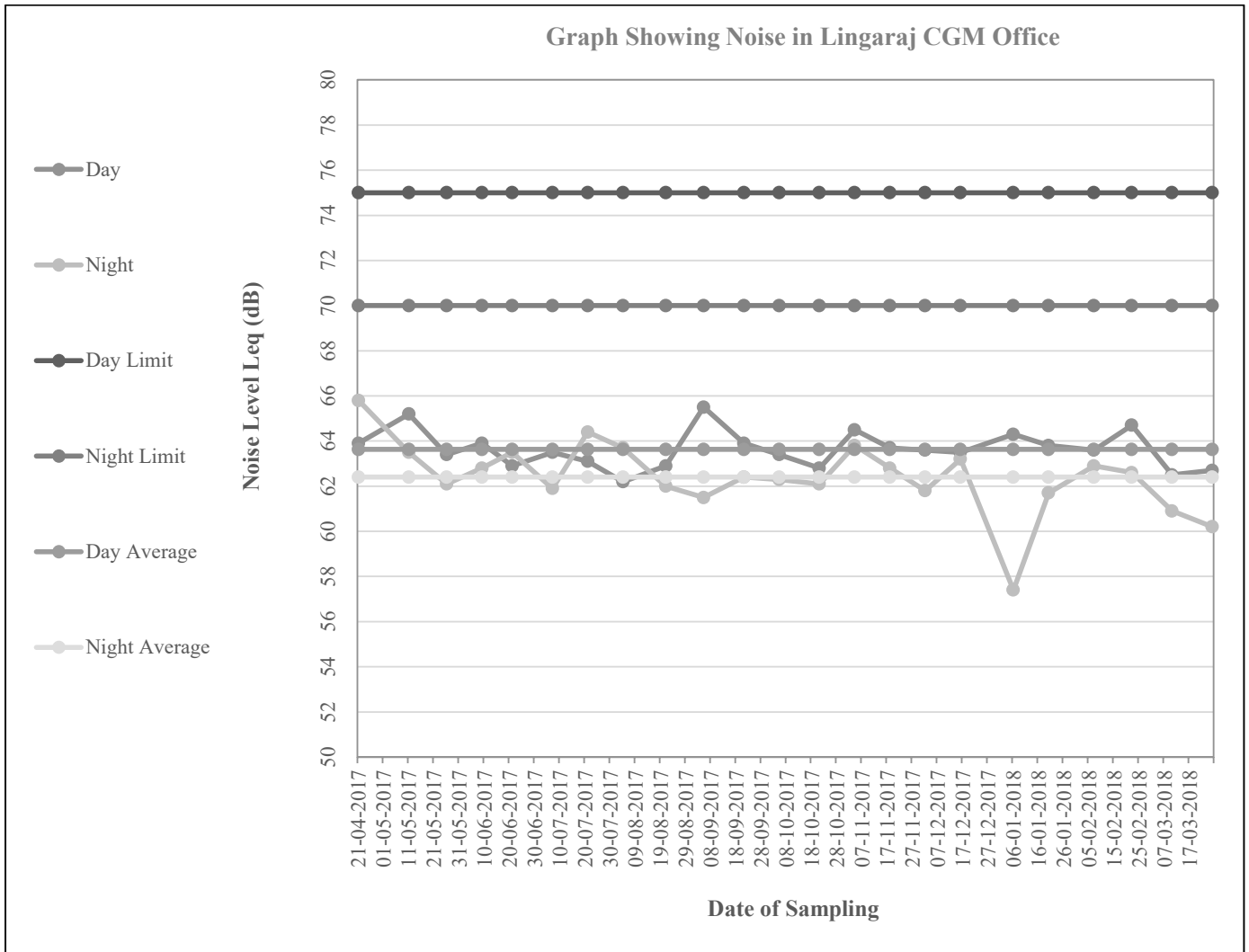


Table: 94

Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Near Shiva Temple

DATE OF SAMPLING	DAY	NIGHT
15/04/2017	63	59.4
21/04/2017	62	62.3
11/05/2017	64	61.5
25/05/2017	62	60.1
06/06/2017	64	62.3
20/06/2017	63	61.9
06/07/2017	64	60.2
20/07/2017	64	59.7
03/08/2017	63	58.8
18/08/2017	62	59.8
04/09/2017	63	59.5
20/09/2017	62	61.3
05/10/2017	63	60.1
20/10/2017	62	59.4
04/11/2017	62	62.5
18/11/2017	63	60.3
02/12/2017	62	60.3
16/12/2017	63	61.2
06/01/2018	63	54.9
20/01/2018	62	57.6
07/02/2018	62	60.3
22/02/2018	60	58.2
10/03/2018	61	58.2
26/03/2018	62	58.9
Brief Statistic (in dB)	Day	Night
Minimum	60	54.9
Maximum	64	62.5
Mean	62.3	60.0
Noise Standard	75	70

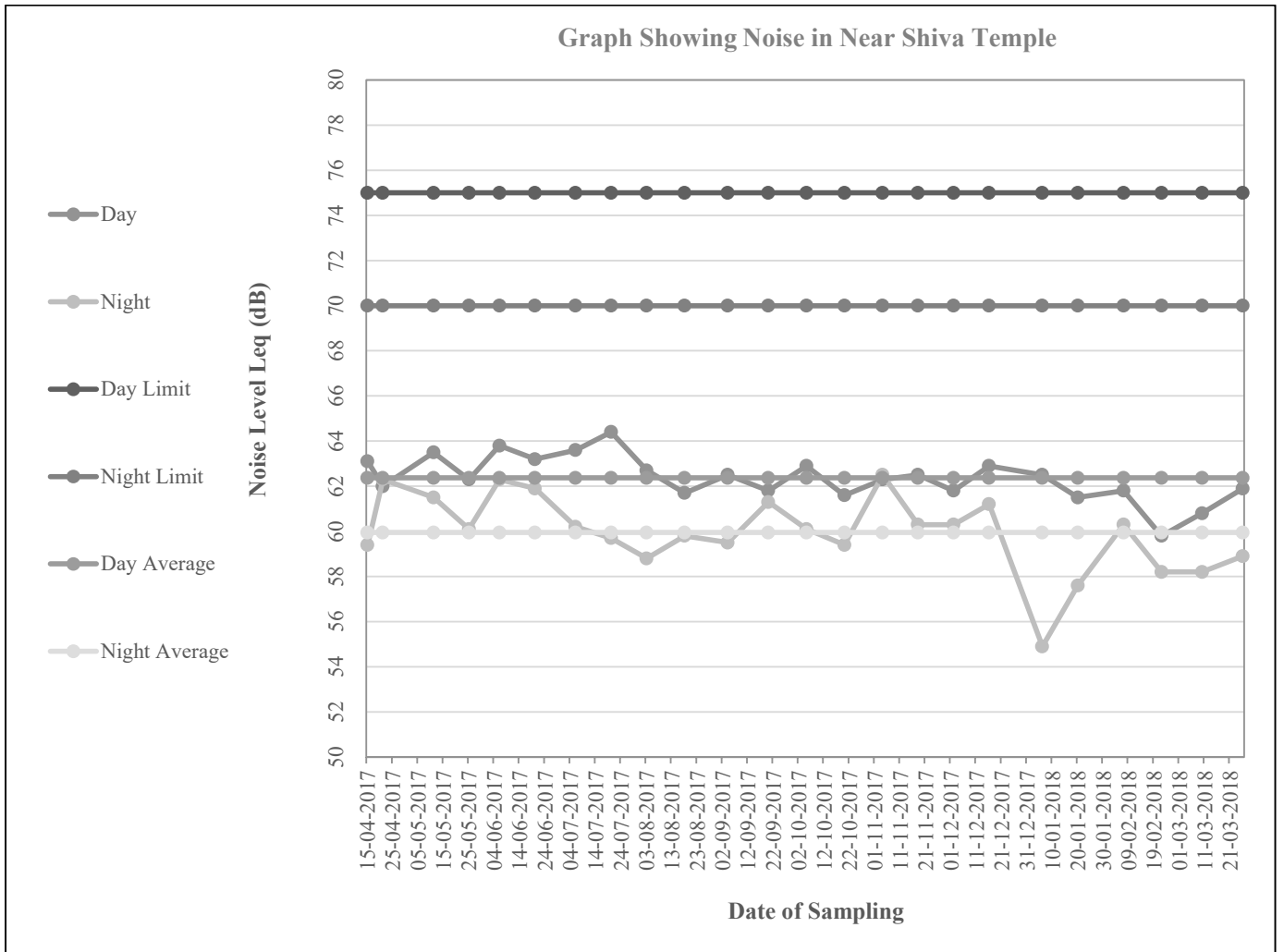


Table: 95

Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Near North Side of Mine

DATE OF SAMPLING	Day	Night
22/04/2017	58	62.3
12/05/2017	57	57.1
22/05/2017	62	60.8
05/06/2017	62	62.5
19/06/2017	62	59.4
05/07/2017	62	59.3
19/07/2017	61	58.2
04/08/2017	58	62.1
21/08/2017	60	56.4
05/09/2017	61	58.5
21/09/2017	62	57.8
11/10/2017	58	59.7
21/10/2017	60	55.2
04/11/2017	61	59.2
18/11/2017	61	60.3
02/12/2017	61	58.1
16/12/2017	62	59.5
06/01/2018	60	56.8
20/01/2018	61	59.8
07/02/2018	61	58.9
22/02/2018	60	57.5
10/03/2018	60	57.5
26/03/2018	60	57.6
Brief Statistic (in dB)	Day	Night
Minimum	57	55.2
Maximum	62	62.5
Mean	60.4	58.9
Noise Standard	75	70

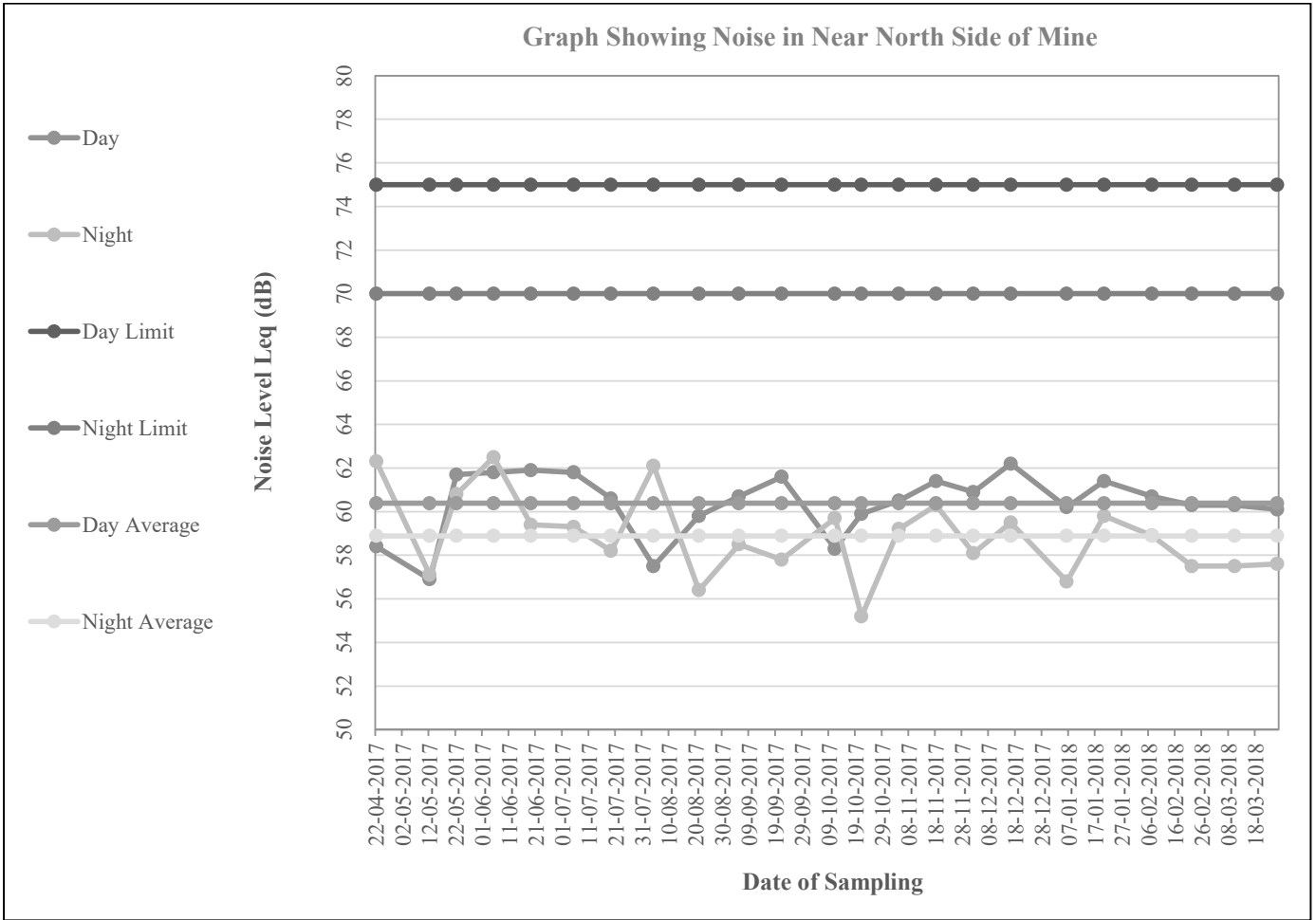


Table: 96

Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Near C.T. Road

DATE OF SAMPLING	DAY	NIGHT
15/04/2017	62	58.8
20/04/2017	62	56.9
10/05/2017	64	59.7
22/05/2017	63	61.2
05/06/2017	64	61.9
19/06/2017	63	61.5
05/07/2017	63	61.5
19/07/2017	62	61.7
03/08/2017	64	57.7
18/08/2017	63	59.1
04/09/2017	64	60.5
20/09/2017	62	61.9
11/10/2017	63	61.9
20/10/2017	63	61.5
04/11/2017	63	62.9
18/11/2017	64	62.7
02/12/2017	62	60.5
16/12/2017	61	60.3
06/01/2018	63	56.3
20/01/2018	64	60.2
07/02/2018	63	62.3
22/02/2018	62	60.4
10/03/2018	62	61.5
26/03/2018	64	61.4
Brief Statistic (in dB)	Day	Night
Minimum	61	56.3
Maximum	64	62.9
Mean	62.8	60.7
Noise Standard	75	70

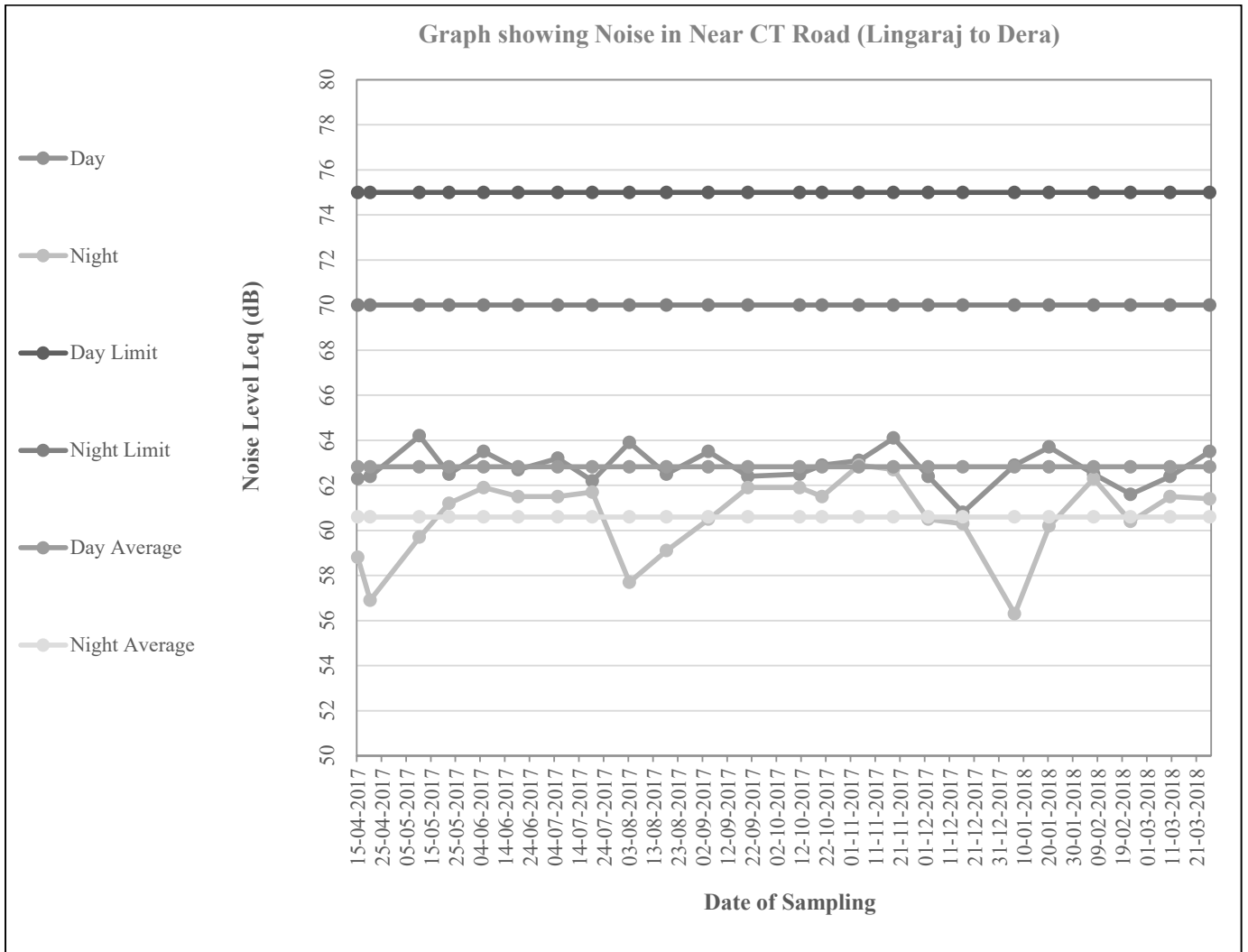


Table: 97**Area: Kaniha****Project: Kaniha OCP****Monitoring Station: Near Jarda Village**

DATE OF SAMPLING	DAY	NIGHT
29/04/2017	59.5	59.5
09/05/2017	59.4	61.8
22/05/2017	62.1	61.5
06/06/2017	62.6	61.2
20/06/2017	62.4	60.2
06/07/2017	59.6	59.1
20/07/2017	59.5	61.2
07/08/2017	58.0	59.4
22/08/2017	60.8	63.5
06/09/2017	63.1	60.2
22/09/2017	60.7	61.3
09/10/2017	60.9	60.3
24/10/2017	61.8	61.2
06/11/2017	60.8	62.1
21/11/2017	62.3	61.7
06/12/2017	62.5	60.4
21/12/2017	62.5	61.4
04/01/2018	62.9	61.4
18/01/2018	61.9	61.3
05/02/2018	62.4	60.9
20/02/2018	62.4	61.7
08/03/2018	61.6	60.8
23/03/2018	60.3	58.5
Brief Statistic (in dB)	Day	Night
Minimum	58	58.5
Maximum	63.1	63.5
Mean	61.3	60.9
Noise Standard	75	70

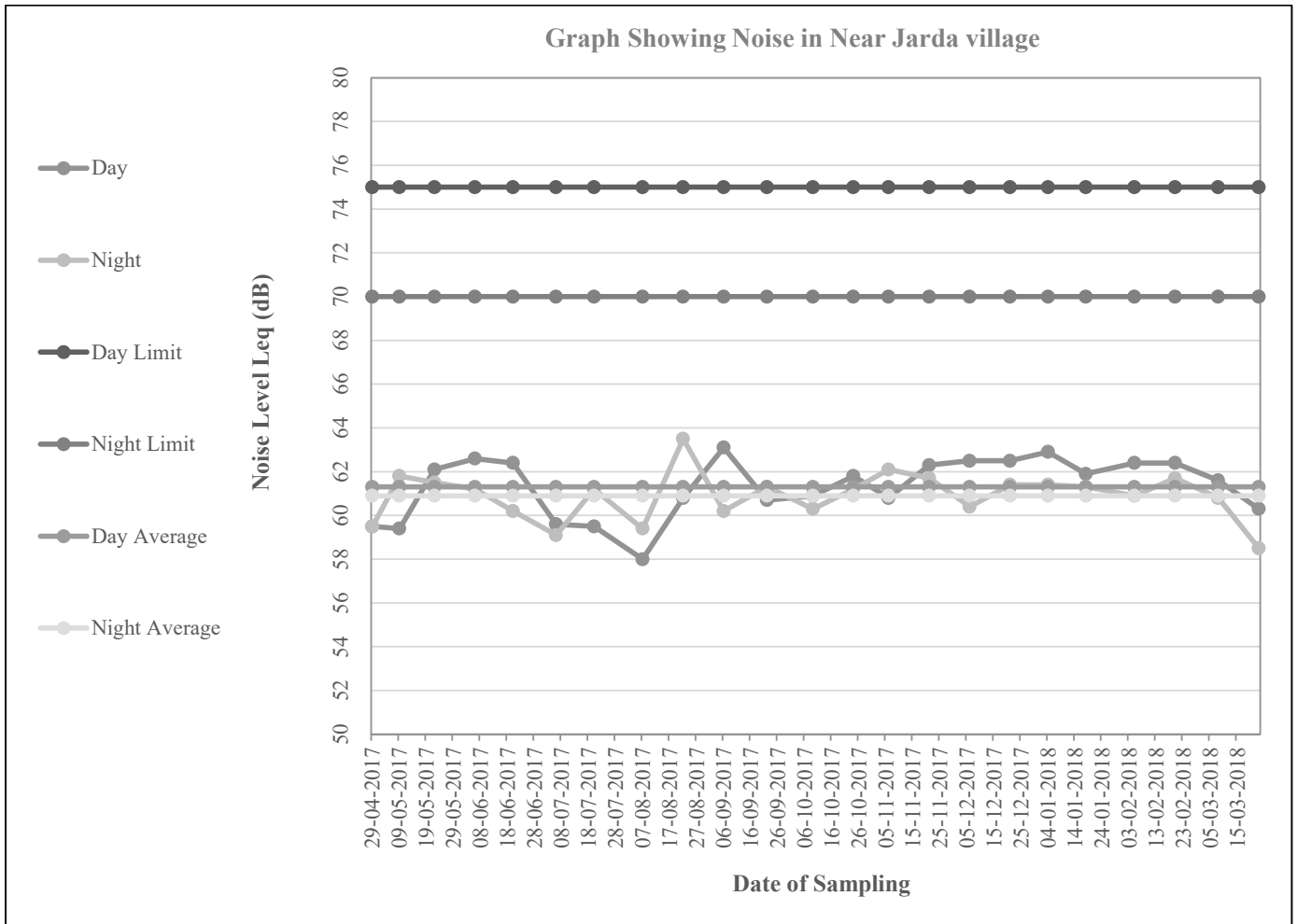


Table: 98

Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Patharmunda Village

DATE OF SAMPLING	DAY	NIGHT
29/04/2017	61	59.6
09/05/2017	58	57.7
22/05/2017	63	61.3
06/06/2017	62	60.2
20/06/2017	61	59.1
06/07/2017	62	60.6
20/07/2017	61	59.4
07/08/2017	58	58.4
22/08/2017	60	58.5
06/09/2017	60	57.8
22/09/2017	62	60.9
09/10/2017	64	61.2
16/10/2017	58	55.3
06/11/2017	64	61.2
21/11/2017	61	59.6
06/12/2017	61	58.9
21/12/2017	62	60.2
04/01/2018	63	60.1
18/01/2018	61	58.7
05/02/2018	62	59.2
20/02/2018	61	57.4
08/03/2018	62	59.7
23/03/2018	62	60.2
Brief Statistic (in dB)	Day	Night
Minimum	58	55.3
Maximum	64	61.3
Mean	61.2	59.4
Noise Standard	75	70

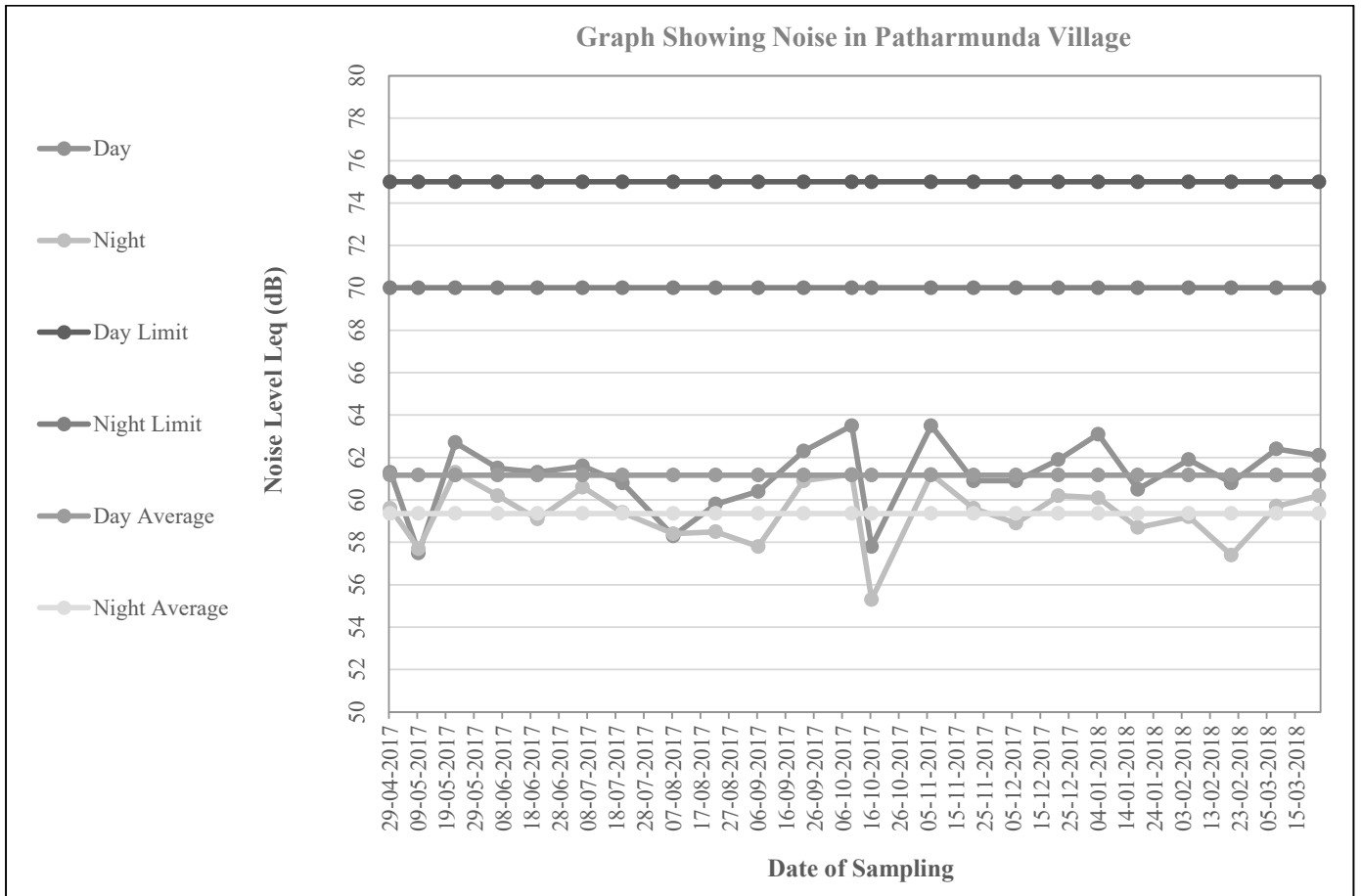


Table: 99

Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Telisingha Village

DATE OF SAMPLING	DAY	NIGHT
29/04/2017	62	60.5
09/05/2017	62	59.8
22/05/2017	62	62
06/06/2017	63	61.7
20/06/2017	60	57.5
06/07/2017	61	61.2
20/07/2017	63	58.4
07/08/2017	60	58.7
22/08/2017	60	60.9
06/09/2017	62	59.2
22/09/2017	62	62.5
09/10/2017	62	60.3
24/10/2017	62	60.3
06/11/2017	62	60.9
21/11/2017	62	60.8
06/12/2017	63	62.3
21/12/2017	63	61.7
04/01/2018	63	61.9
18/01/2018	63	60.3
05/02/2018	63	61.9
20/02/2018	61	59.7
08/03/2018	61	60.2
23/03/2018	62	59.4
Brief Statistic (in dB)	Day	Night
Minimum	60	57.5
Maximum	63	62.5
Mean	61.8	60.5
Noise Standard	75	70

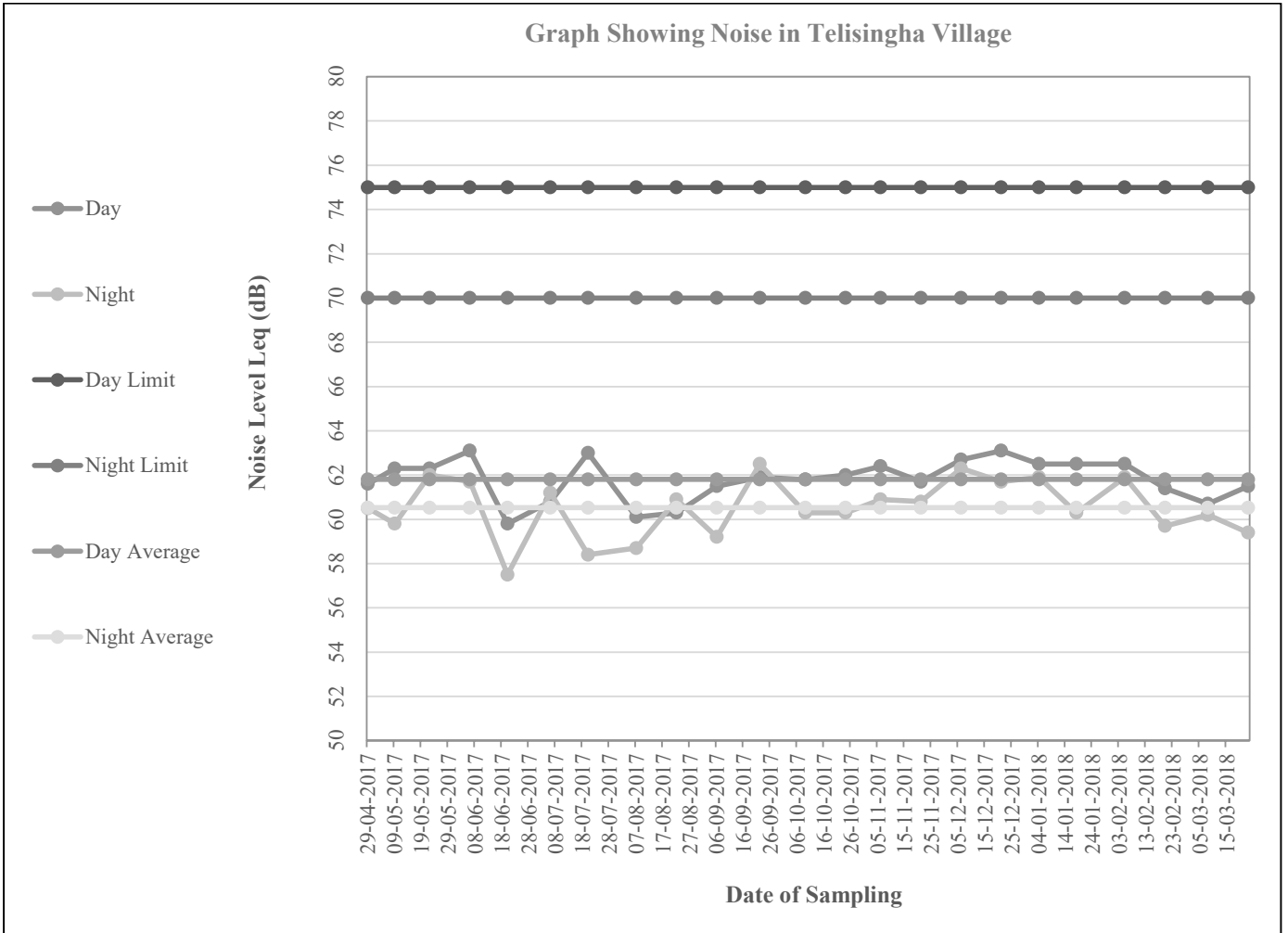


Table: 100

Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Site Office

DATE OF SAMPLING	DAY	NIGHT
29/04/2017	62.3	61.5
09/05/2017	55.7	59.5
22/05/2017	64.7	62.1
06/06/2017	60.4	59.8
20/06/2017	62.6	63.1
06/07/2017	61.1	60.4
20/07/2017	62	60.6
07/08/2017	61	59.3
22/08/2017	62.9	59.3
06/09/2017	62.7	63.1
22/09/2017	62.4	61.9
09/10/2017	62.4	62.1
24/10/2017	62.4	62.3
06/11/2017	63.7	62.8
21/11/2017	63.4	63.1
06/12/2017	63.4	62.9
21/12/2017	63.7	60.5
04/01/2018	63.2	62.5
18/01/2018	63.2	60.5
05/02/2018	63.1	62.4
20/02/2018	63.5	60.9
08/03/2018	63.8	61.4
23/03/2018	61.1	61.1
Brief Statistic (in dB)	Day	Night
Minimum	55.7	59.3
Maximum	64.7	63.1
Mean	62.4	61.4
Noise Standard	75	70

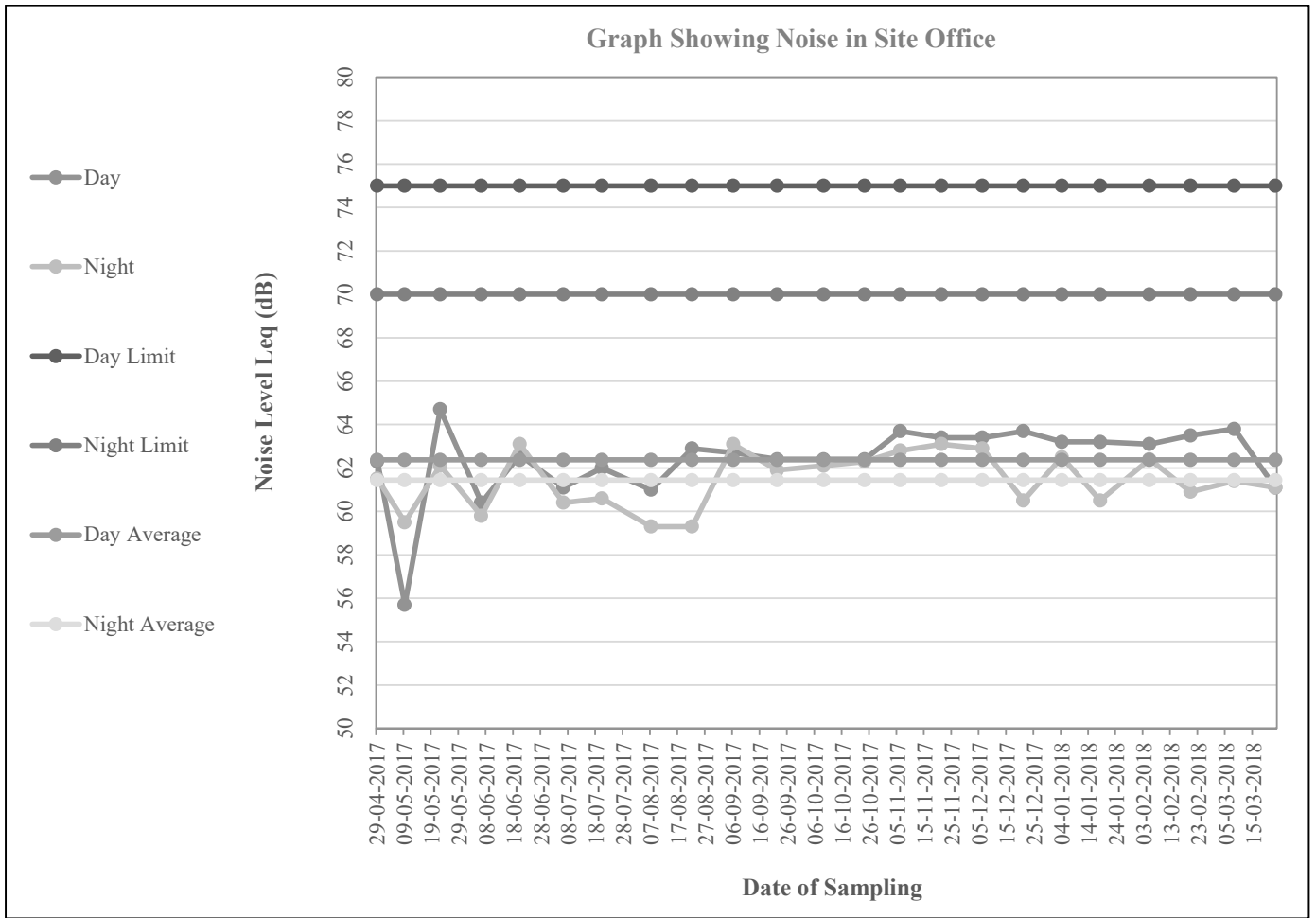


Table: 101

Area: Hingula
Project: Hingula OCP
Monitoring Station: Near Project Office

DATE OF SAMPLING	DAY	NIGHT
19/04/2017	65	67.6
04/05/2017	68	69.2
18/05/2017	67	67.8
06/06/2017	67	64.8
23/06/2017	65	67.1
06/07/2017	67	67.1
20/07/2017	67	65.9
04/08/2017	66	64
21/08/2017	64	65.6
05/09/2017	67	63.8
21/09/2017	66	63.9
06/10/2017	69	68.2
21/10/2017	64	66.6
01/11/2017	67	66.2
16/11/2017	66	64.9
01/12/2017	66	65.4
18/12/2017	66	64.8
03/01/2018	65	63.6
17/01/2018	67	64.9
02/02/2018	65	63.9
17/02/2018	65	64.1
04/03/2018	67	64.3
19/03/2018	64	63.2
Brief Statistic (in dB)	Day	Night
Minimum	64	63.2
Maximum	69	69.2
Mean	66.1	65.5
Noise Standard	75	70

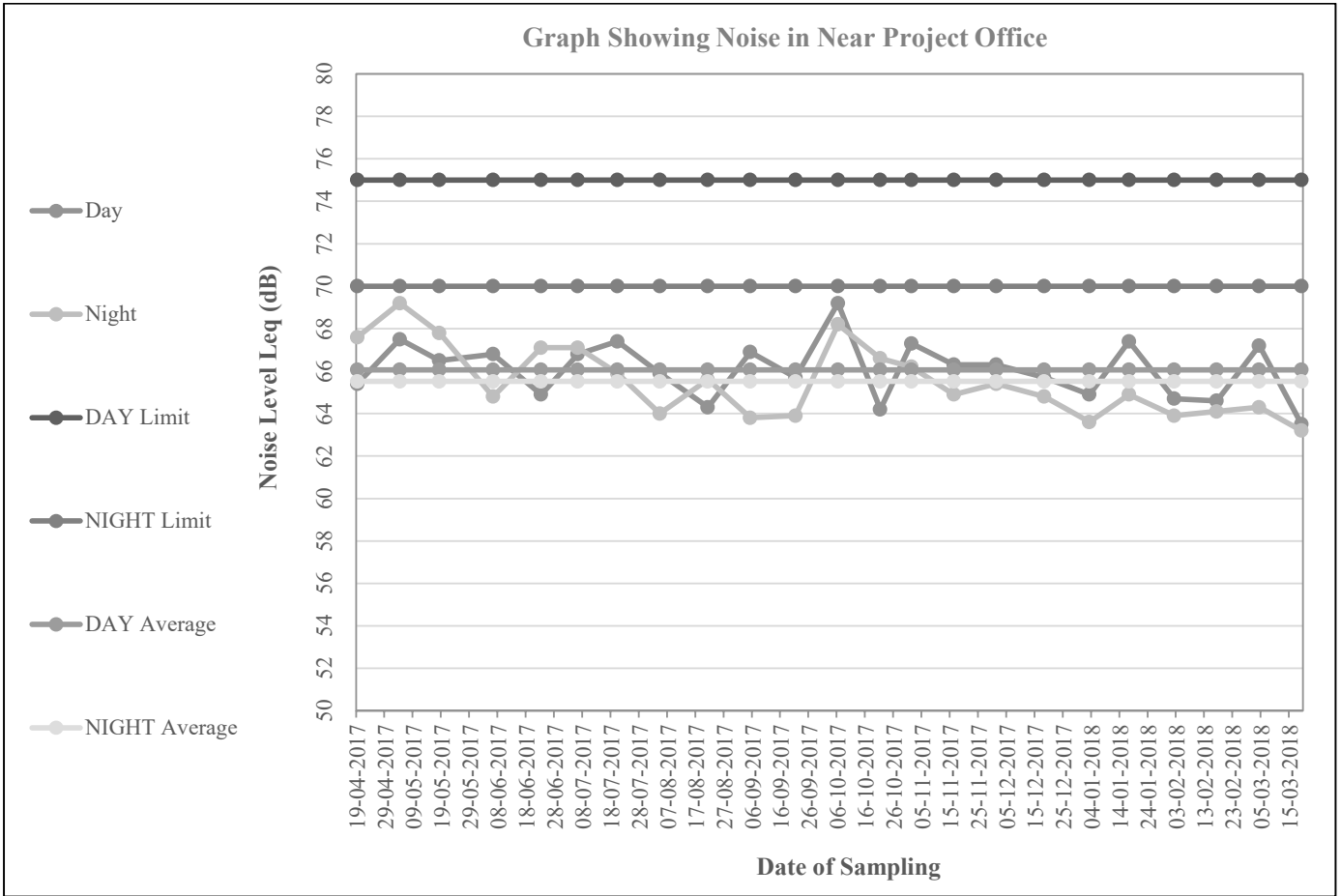


Table: 102

Area: Hingula
Project: Hingula OCP
Monitoring Station: Village Kumunda

DATE OF SAMPLING	DAY	NIGHT
18/04/2017	57	57.6
08/05/2017	57	56.8
17/05/2017	59	56.3
02/06/2017	61	59.2
23/06/2017	59	56.4
11/07/2017	62	56.7
24/07/2017	61	61.2
08/08/2017	57	57.8
23/08/2017	58	57.9
07/09/2017	61	57.2
24/09/2017	59	58.2
11/10/2017	61	58.1
16/10/2017	57	54.5
01/11/2017	60	58.2
16/11/2017	60	58.9
04/12/2017	61	58.2
19/12/2017	63	61.4
01/01/2018	61	59.4
15/01/2018	62	59.5
17/01/2018	60	58.4
02/02/2018	61	59.2
17/02/2018	60	58.4
04/03/2018	61	58.9
19/03/2018	60	57.9
Brief Statistic (in dB)	Day	Night
Minimum	57	54.5
Maximum	63	61.4
Mean	60.1	58.2
Noise Standard	75	70

Graph Showing Noise in Village Kumunda (NAAQS)

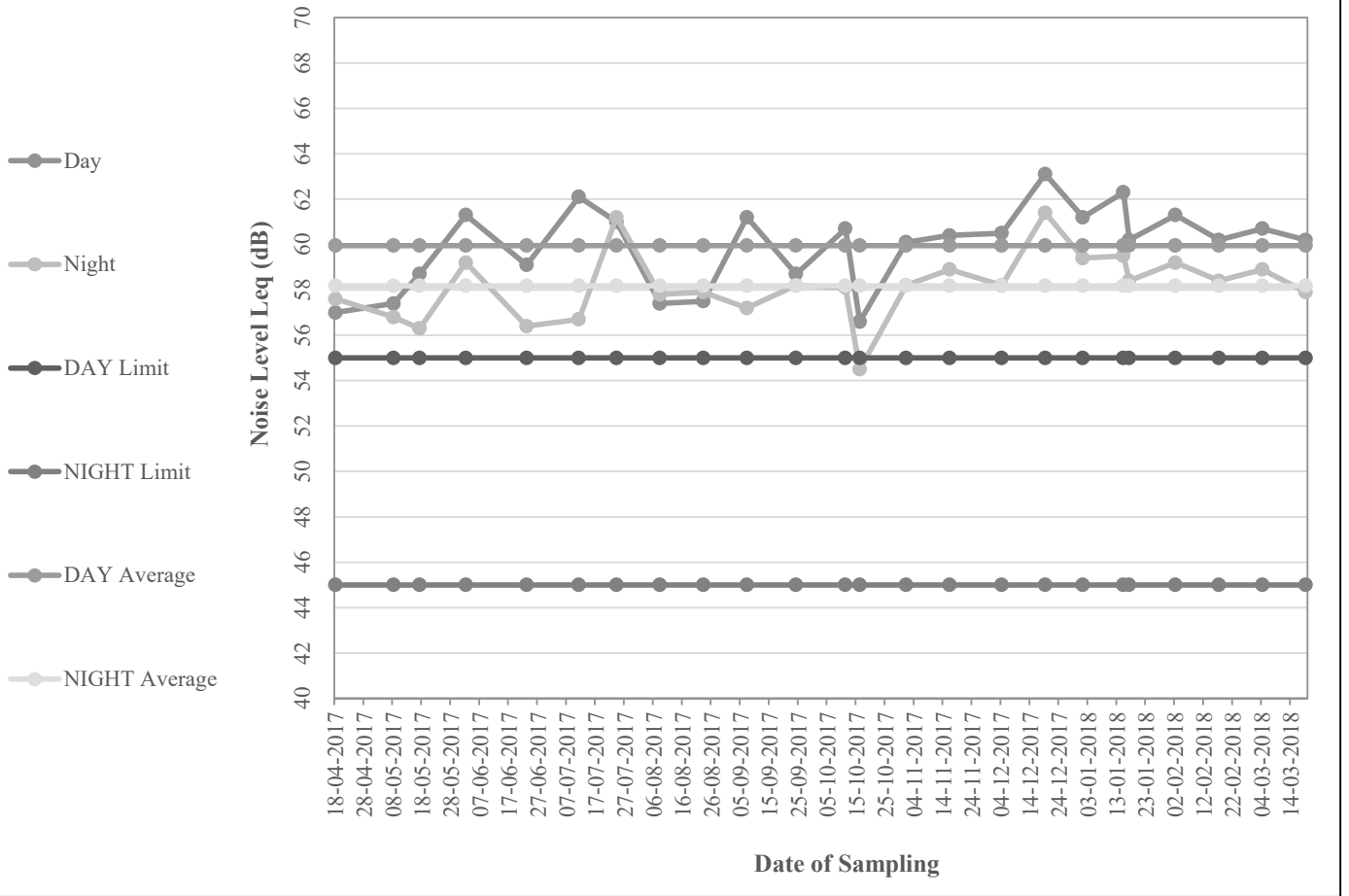


Table: 103

Area: Hingula
Project: Hingula OCP
Monitoring Station: Village Chhotobereni

DATE OF SAMPLING	DAY	NIGHT
18/04/2017	58	55.8
08/05/2017	56	57.2
17/05/2017	59	53.3
02/06/2017	60	57.6
23/06/2017	59	54.7
11/07/2017	61	57.3
24/07/2017	60	57.4
08/08/2017	58	56.3
23/08/2017	59	57.7
07/09/2017	60	59.3
24/09/2017	59	56.8
11/10/2017	60	56.8
16/10/2017	58	55.3
01/11/2017	59	57.6
16/11/2017	60	57.6
04/12/2017	59	57.8
19/12/2017	61	57.9
01/01/2018	60	56.8
15/01/2018	60	56.9
17/01/2018	59	57.5
02/02/2018	61	57.4
17/02/2018	59	57.5
19/03/2018	59	56.4
04/03/2018	60	57.5
Brief Statistic (in dB)	Day	Night
Minimum	56	53.3
Maximum	61	59.3
Mean	59.3	57.0
Noise Standard	75	70

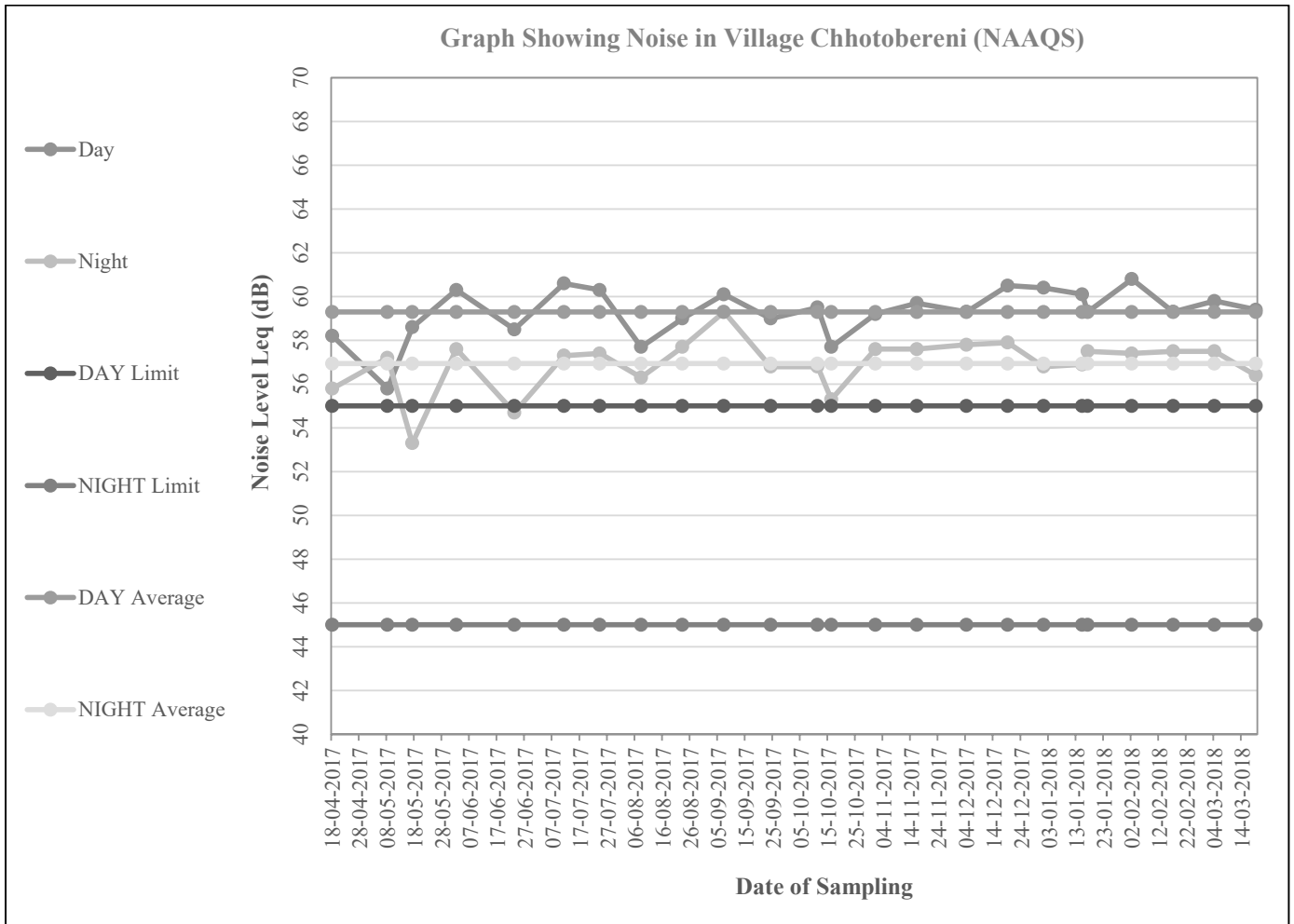


Table: 104

Area: Hingula
Project: Hingula OCP
Monitoring Station: Village Time Office

DATE OF SAMPLING	DAY	NIGHT
19/04/2017	68	63.8
04/05/2017	64	63.7
18/05/2017	68	66.5
06/06/2017	66	66.5
23/06/2017	65	66.2
06/07/2017	65	64.7
20/07/2017	63	62.6
04/08/2017	70	66.9
21/08/2017	67	64.9
05/09/2017	65	64.2
21/09/2017	65	64.1
06/10/2017	70	67.6
21/10/2017	67	64.6
01/11/2017	66	65.9
16/11/2017	66	65.2
01/12/2017	66	63.1
18/12/2017	67	65.3
03/01/2018	66	64.1
17/01/2018	66	65.2
02/02/2018	66	64.6
17/02/2018	66	63.2
04/03/2018	66	63.7
19/03/2018	65	63.9
Brief Statistic (in dB)	Day	Night
Minimum	63	62.6
Maximum	70	67.6
Mean	66.1	64.8
Noise Standard	75	70

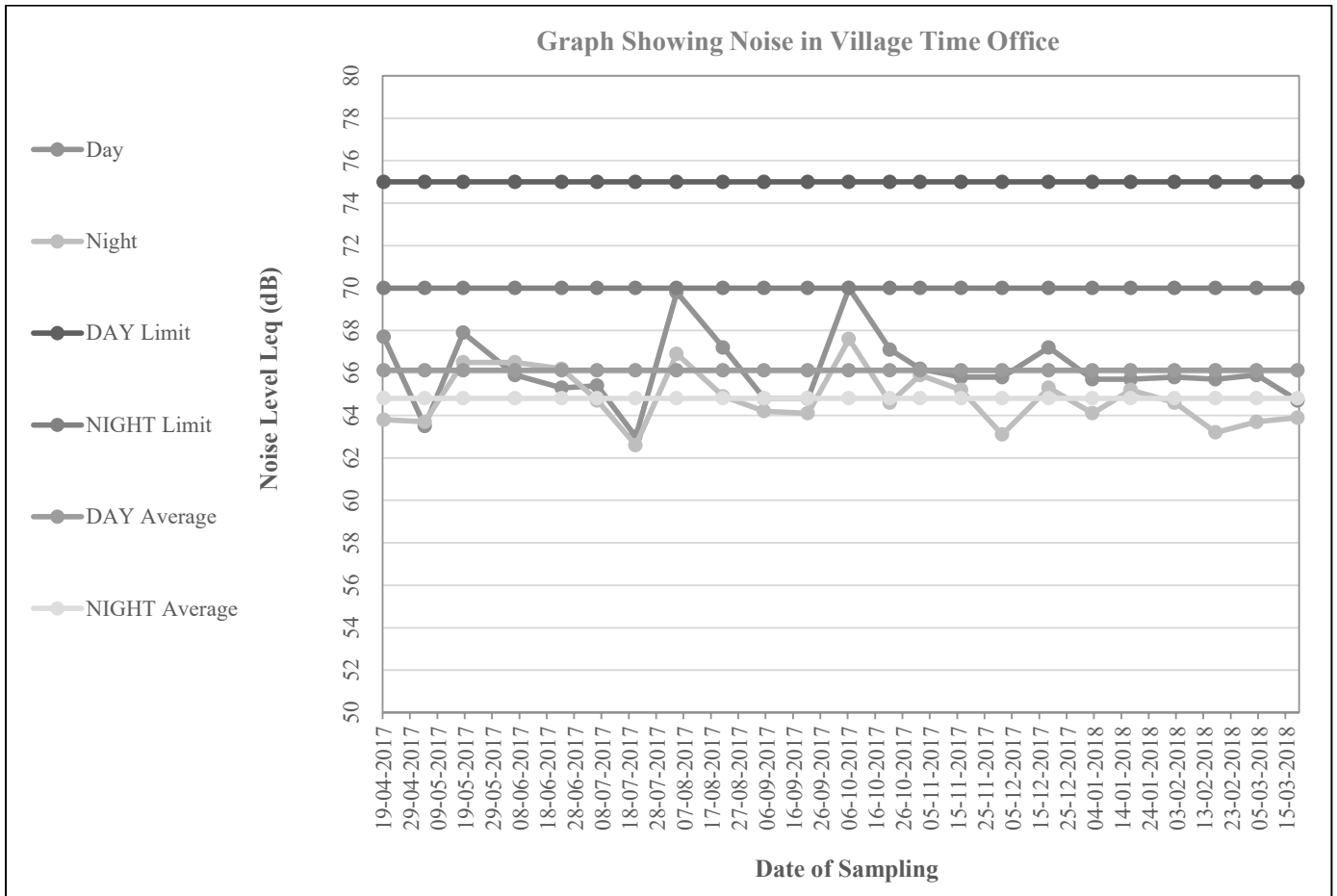


Table: 105

Area: Hingula
Project: Balram OCP
Monitoring Station: Natada Village

DATE OF SAMPLING	DAY	NIGHT
18/04/2017	62	61.2
08/05/2017	60	58.7
17/05/2017	64	59.8
02/06/2017	59	61.1
21/06/2017	62	60.5
11/07/2017	61	61.2
24/07/2017	60	62
08/08/2017	59	56.5
23/08/2017	61	60.5
07/09/2017	59	58.1
24/09/2017	61	59.5
11/10/2017	62	60.3
16/10/2017	55	56.2
01/11/2017	63	60.8
16/11/2017	62	61.7
04/12/2017	63	60.7
19/12/2017	63	60.6
01/01/2018	63	60.3
15/01/2018	63	62
17/01/2018	63	60.2
02/02/2018	63	61.3
17/02/2018	63	60.2
04/03/2018	63	61.6
19/03/2018	62	60.8
Brief Statistic (in dB)	Day	Night
Minimum	55	56.2
Maximum	64	62
Mean	61.3	60.2
Noise Standard	75	70

Graph Showing Noise in Natada Village (NAAQS)

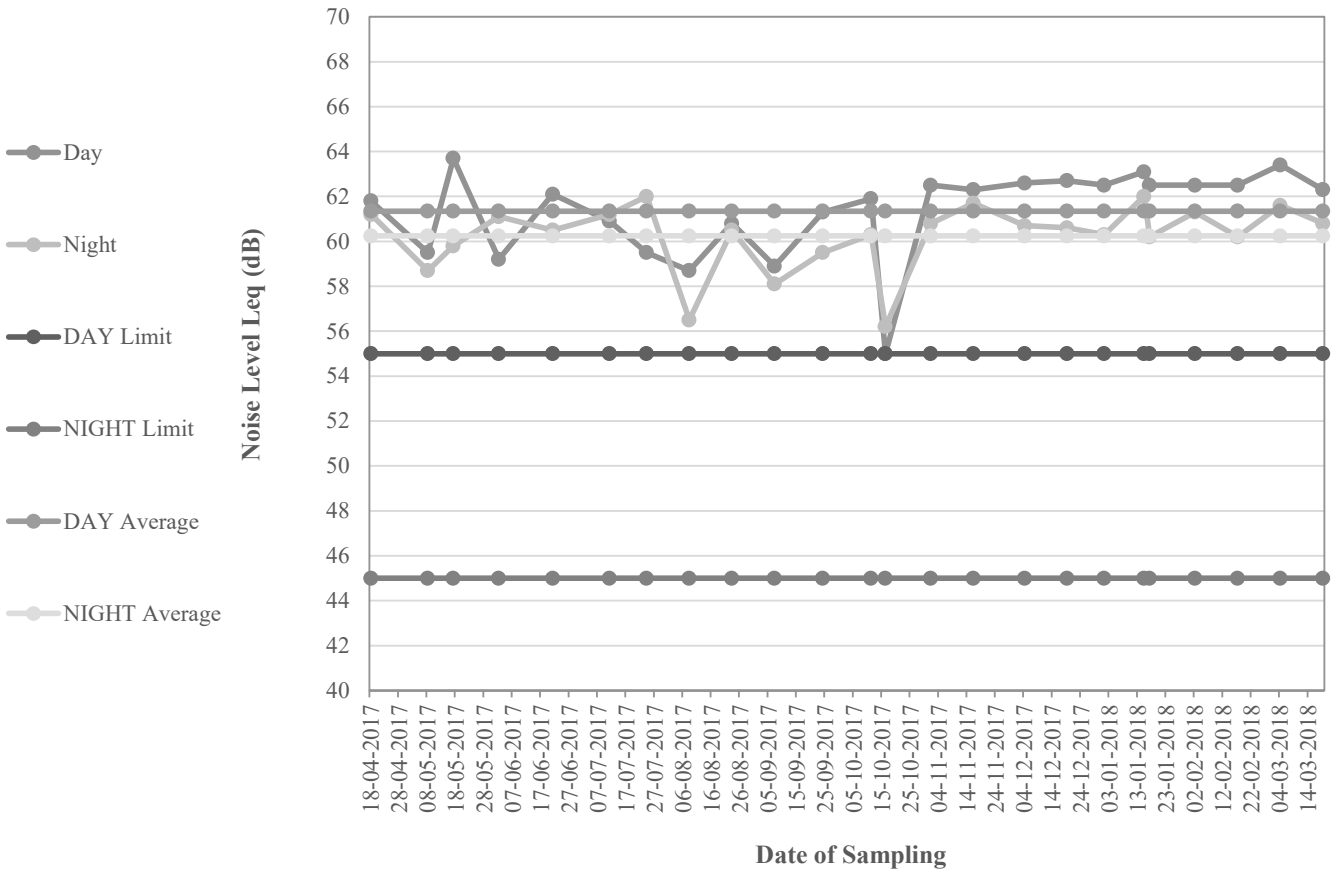


Table: 106

Area: Hingula
Project: Balram OCP
Monitoring Station: Natada Village

DATE OF SAMPLING	DAY	NIGHT
18/04/2017	59	59.6
08/05/2017	63	59.6
17/05/2017	63	60.1
02/06/2017	62	56.7
21/06/2017	61	59.7
11/07/2017	61	60.4
24/07/2017	60	61
08/08/2017	57	58.6
23/08/2017	58	59.1
07/09/2017	59	58
24/09/2017	60	60.3
11/10/2017	63	59.3
16/10/2017	56	57.4
01/11/2017	62	59.8
16/11/2017	61	59.3
04/12/2017	62	60.1
19/12/2017	63	61.7
01/01/2018	61	60.1
15/01/2018	63	60.1
02/02/2018	63	60.2
17/02/2018	61	57.3
04/03/2018	61	58.2
19/03/2018	61	57.3
Brief Statistic (in dB)	Day	Night
Minimum	56	56.7
Maximum	63	61.7
Mean	60.8	59.3
Noise Standard	75	70

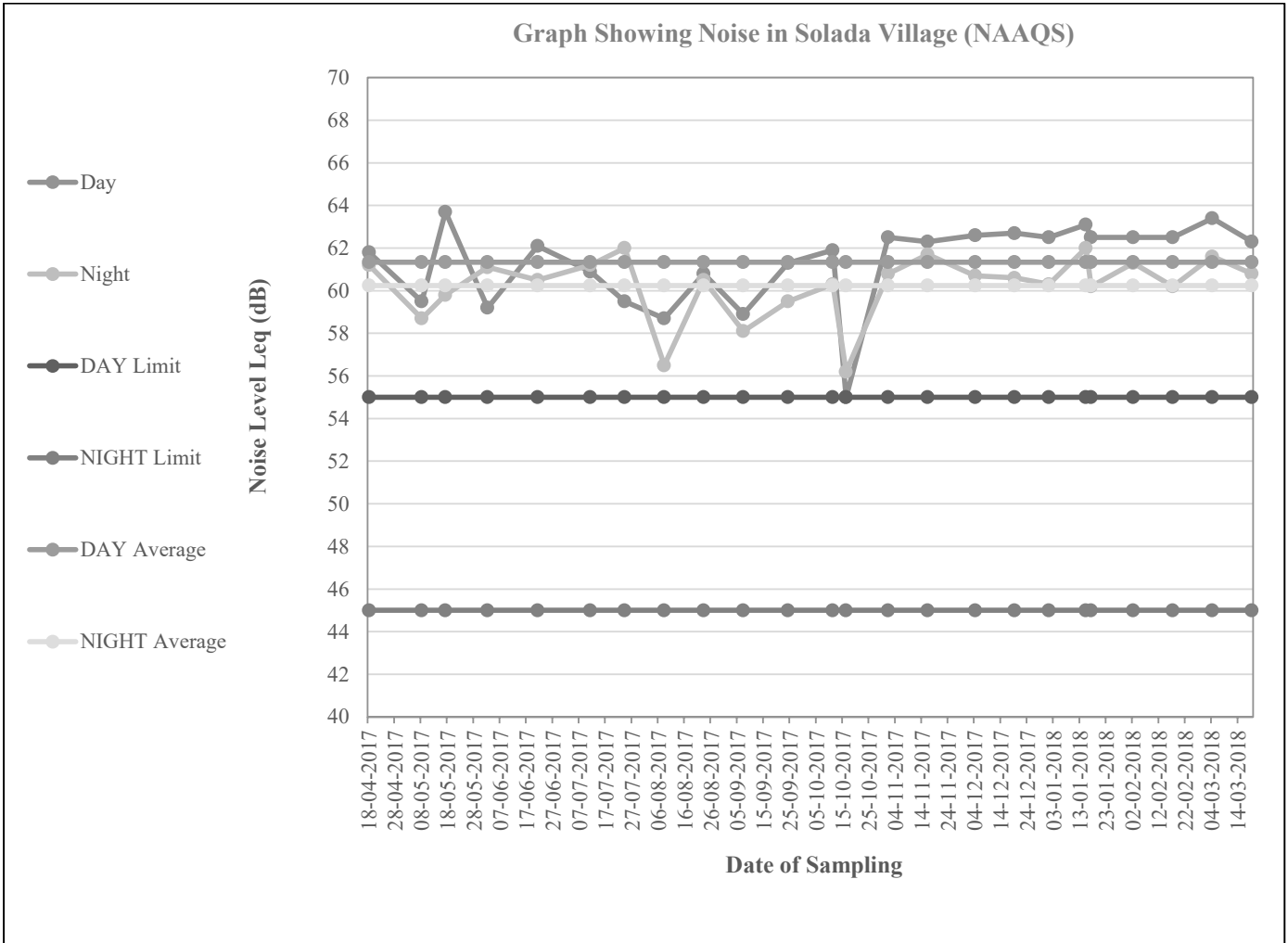


Table: 107**Area: Hingula****Project: Balram OCP****Monitoring Station: Project Office Balram OCP**

DATE OF SAMPLING	DAY	NIGHT
19/04/2017	67	62.7
04/05/2017	65	63.3
18/05/2017	64	63.1
09/06/2017	65	65.2
21/06/2017	65	62.6
07/07/2017	65	62.8
21/07/2017	65	62.4
04/08/2017	66	66.7
21/08/2017	65	62.6
05/09/2017	65	63.7
21/09/2017	66	67.1
06/10/2017	68	65.9
23/10/2017	64	62.7
02/11/2017	66	64.7
17/11/2017	64	63.2
02/12/2017	65	64.9
16/12/2017	66	64.5
06/01/2018	65	57.2
20/01/2018	64	62.5
07/02/2018	64	62.5
22/02/2018	64	63.2
10/03/2018	64	62.7
26/03/2018	64	61.7
Brief Statistic (in dB)	Day	Night
Minimum	64	57.2
Maximum	68	67.1
Mean	65.1	63.4
Noise Standard	75	70

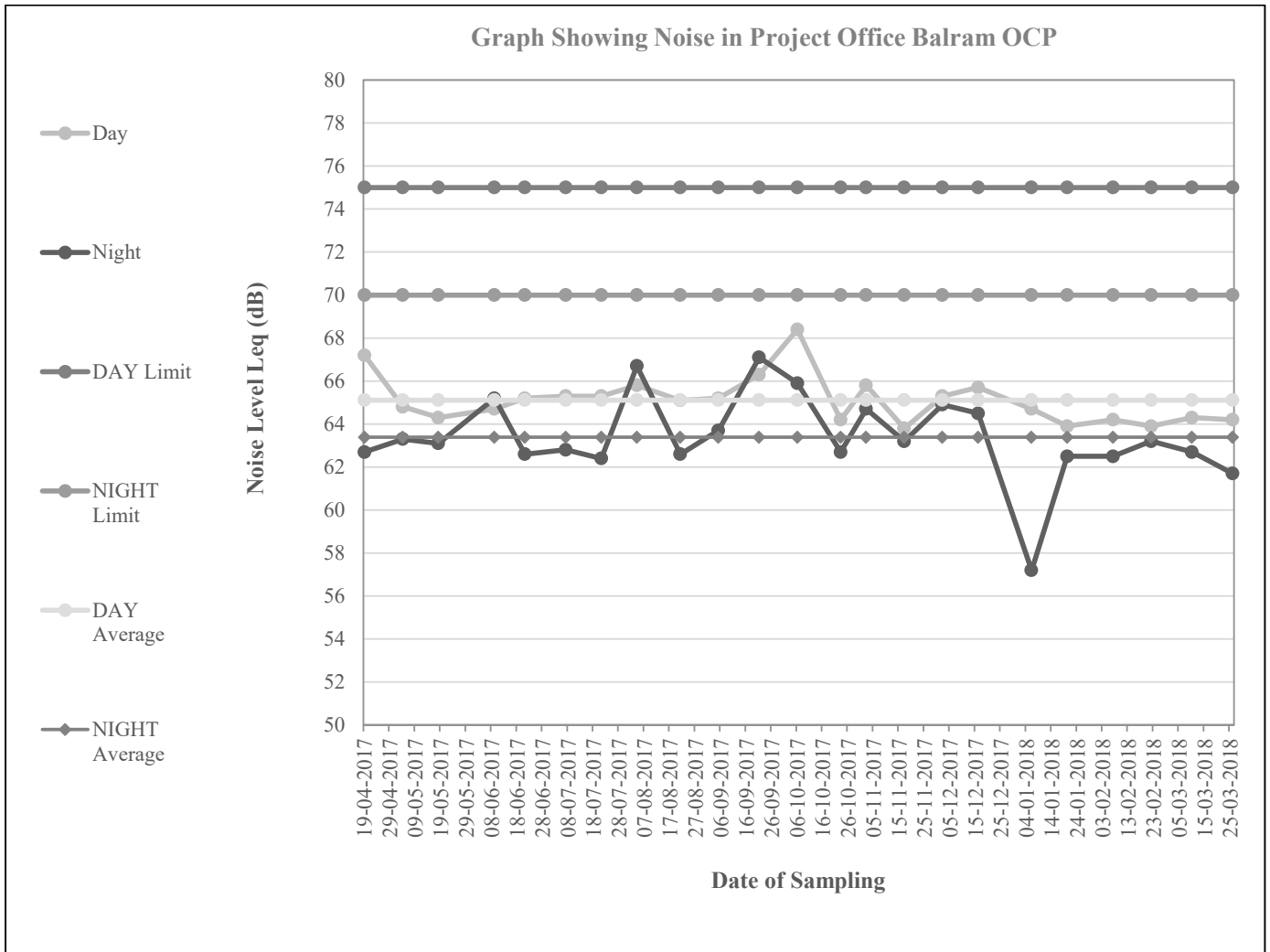


Table: 108**Area: Hingula****Project: Balram OCP****Monitoring Station: On Backfilled Area Near Dozer Shed**

DATE OF SAMPLING	DAY	NIGHT
19/04/2017	67	63.3
04/05/2017	67	64.8
18/05/2017	66	65.9
09/06/2017	67	67.8
21/06/2017	68	66.8
07/07/2017	67	66.9
21/07/2017	65	66.3
04/08/2017	66	64.7
21/08/2017	67	65.4
05/09/2017	67	65.9
21/09/2017	68	65.9
06/10/2017	69	67.4
21/10/2017	67	65.6
02/11/2017	68	67.2
17/11/2017	65	62.4
04/12/2017	66	64.9
19/12/2017	66	65.3
01/01/2018	67	65.9
15/01/2018	67	66.2
17/01/2018	67	65.9
02/02/2018	66	64.7
17/02/2018	67	65.9
04/03/2018	66	65.3
19/03/2018	67	64.7
Brief Statistic (in dB)	Day	Night
Minimum	65.0	62.4
Maximum	69.0	67.8
Mean	66.8	65.6
Noise Standard	75	70

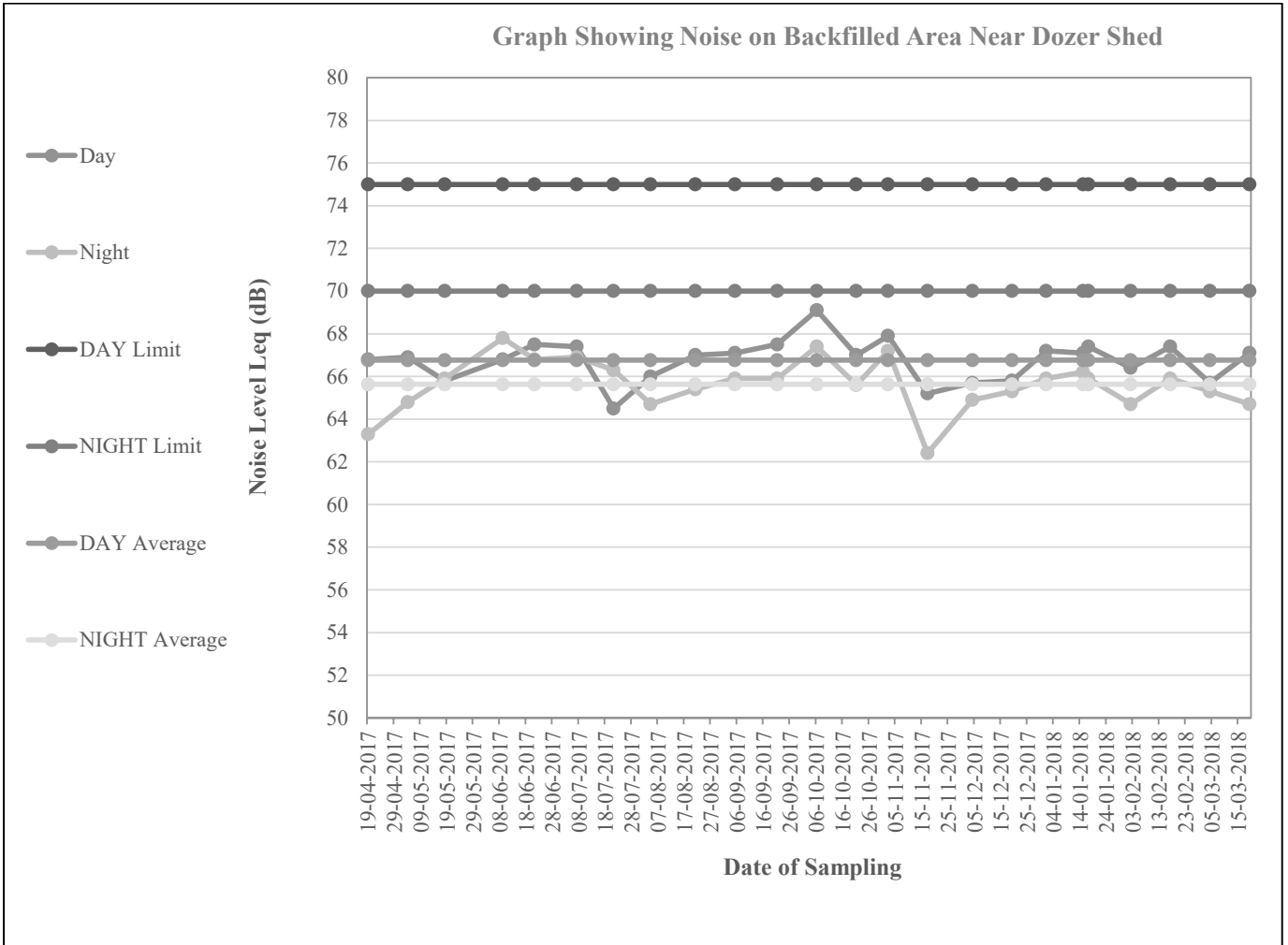


Table: 109

Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Talcher Colliery

DATE OF SAMPLING	Day	Night
14/04/2017	64.3	62.6
25/04/2017	65.2	63.2
13/05/2017	65.6	64.9
29/05/2017	65.1	63.8
14/06/2017	65.3	65.1
27/06/2017	64.9	63.1
14/07/2017	64.5	63.9
28/07/2017	69.3	63.9
12/08/2017	65.6	65.2
29/08/2017	67.3	65.3
13/09/2017	65.4	63.9
27/09/2017	64.5	63.9
13/10/2017	67.5	60.4
27/10/2017	68.5	61.2
13/11/2017	66.4	65.2
28/11/2017	65.3	63.9
13/12/2017	65.8	64.3
28/12/2017	64.8	64.3
11/01/2018	64.8	63.5
27/01/2018	66.2	65.3
10/02/2018	64.5	62.9
25/02/2018	63.9	63.1
14/03/2018	65.1	63.4
29/03/2018	65.1	63.6
Brief Statistic (in dB)	Day	Night
Minimum	64	60.4
Maximum	69	65.3
Mean	65.6	63.7
Noise Standard	75	70

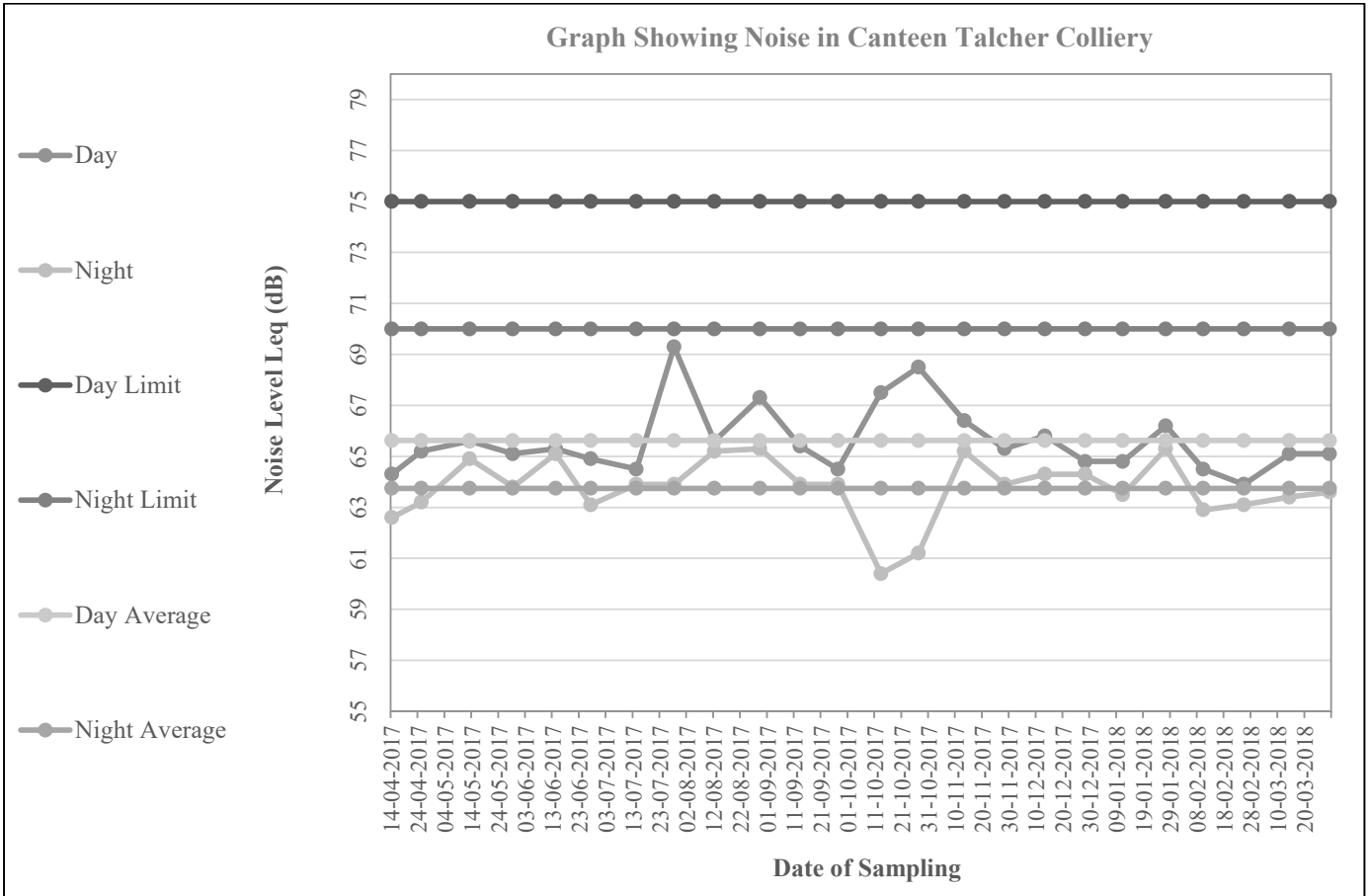


Table: 110

Area: Talcher
Project: Talcher Colliery
Monitoring Station: GM Office, Talcher

DATE OF SAMPLING	DAY	NIGHT
14/04/2017	61.2	58.4
25/04/2017	62.1	60
13/05/2017	62.1	60.3
29/05/2017	63.2	61.4
14/06/2017	61.7	59.5
27/06/2017	62.8	59.2
14/07/2017	61.8	58.8
28/07/2017	63.3	62.6
12/08/2017	63.2	61.5
29/08/2017	61.7	60.2
13/09/2017	61.8	61.3
26/09/2017	63.2	62.6
13/10/2017	63.4	65.2
27/10/2017	62.5	65.1
13/11/2017	63.2	61.9
28/11/2017	62.7	60.3
13/12/2017	62.9	60.9
28/12/2017	62.5	61.9
11/01/2018	62.4	60.2
27/01/2018	62.5	60.1
10/02/2018	63.2	60.7
25/02/2018	62.4	60.2
14/03/2018	63.7	60.1
29/03/2018	63.7	60.8
Brief Statistic (in dB)	Day	Night
Minimum	61.2	58.4
Maximum	63.7	65.2
Mean	62.6	61.0
Noise Standard	75	70

Graph Showing Noise in GM Office, Talcher

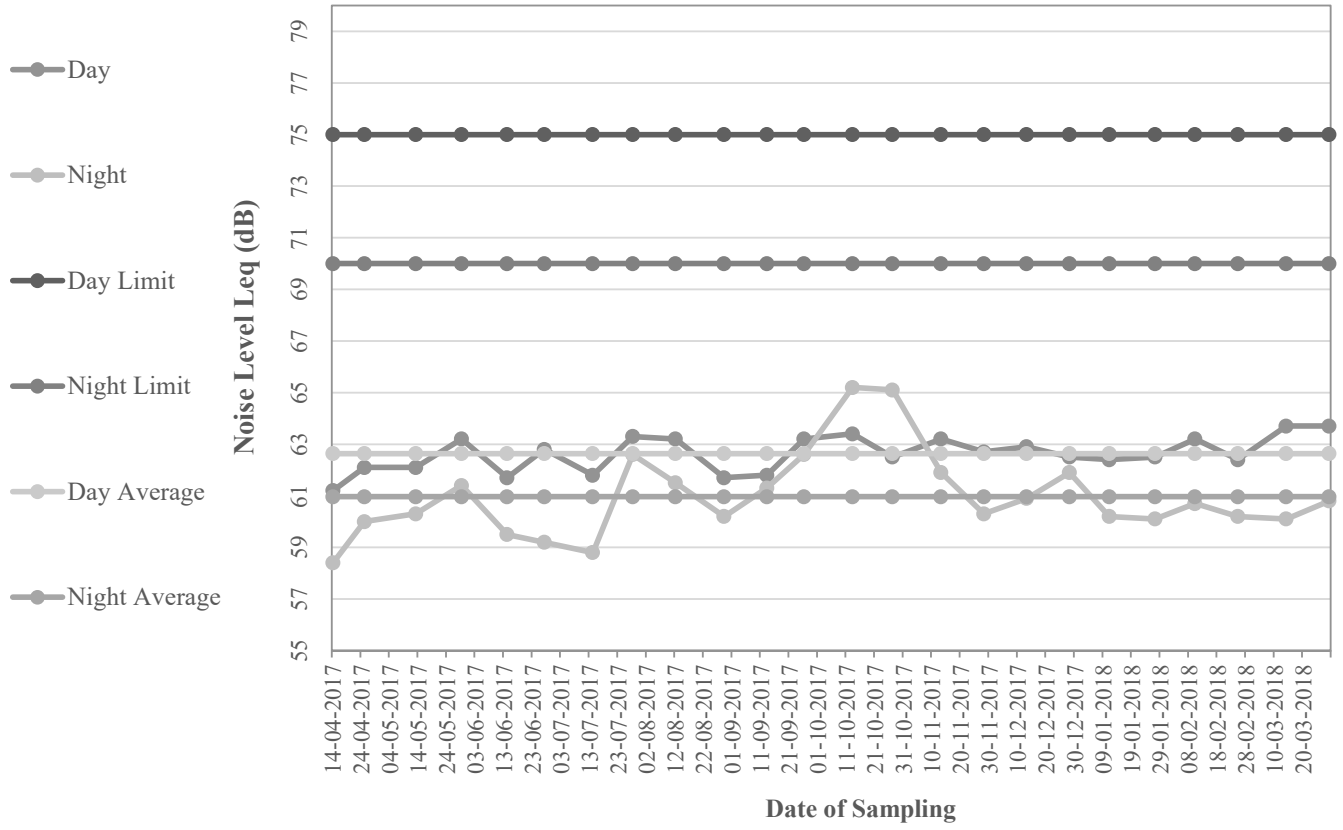


Table: 111**Area: Talcher****Project: Nandira Colliery****Monitoring Station: Project Office, Nandira Colliery**

DATE OF SAMPLING	DAY	NIGHT
14/04/2017	63.2	65.4
28/04/2017	56.7	57
13/05/2017	63.2	61.2
30/05/2017	63.2	62
14/06/2017	63.8	61.2
27/06/2017	63.2	61.4
28/07/2017	63.9	62.1
12/08/2017	63.1	62
29/08/2017	62.5	60.7
13/09/2017	63.1	62.7
27/09/2017	63.7	61.5
13/10/2017	62.9	61.5
27/10/2017	61.9	60.9
14/11/2017	63.1	61.9
29/11/2017	63.7	61.4
14/12/2017	62.6	61.9
29/12/2017	63.7	61.9
12/01/2018	63.4	60.2
29/01/2018	62.7	61.9
10/02/2018	62.4	61.7
25/02/2018	62.5	61.3
14/03/2018	62.9	60.3
29/03/2018	62.5	60.9
Brief Statistic (in dB)	Day	Night
Minimum	56.7	57
Maximum	63.9	65.4
Mean	62.8	61.4
Noise Standard	75	70

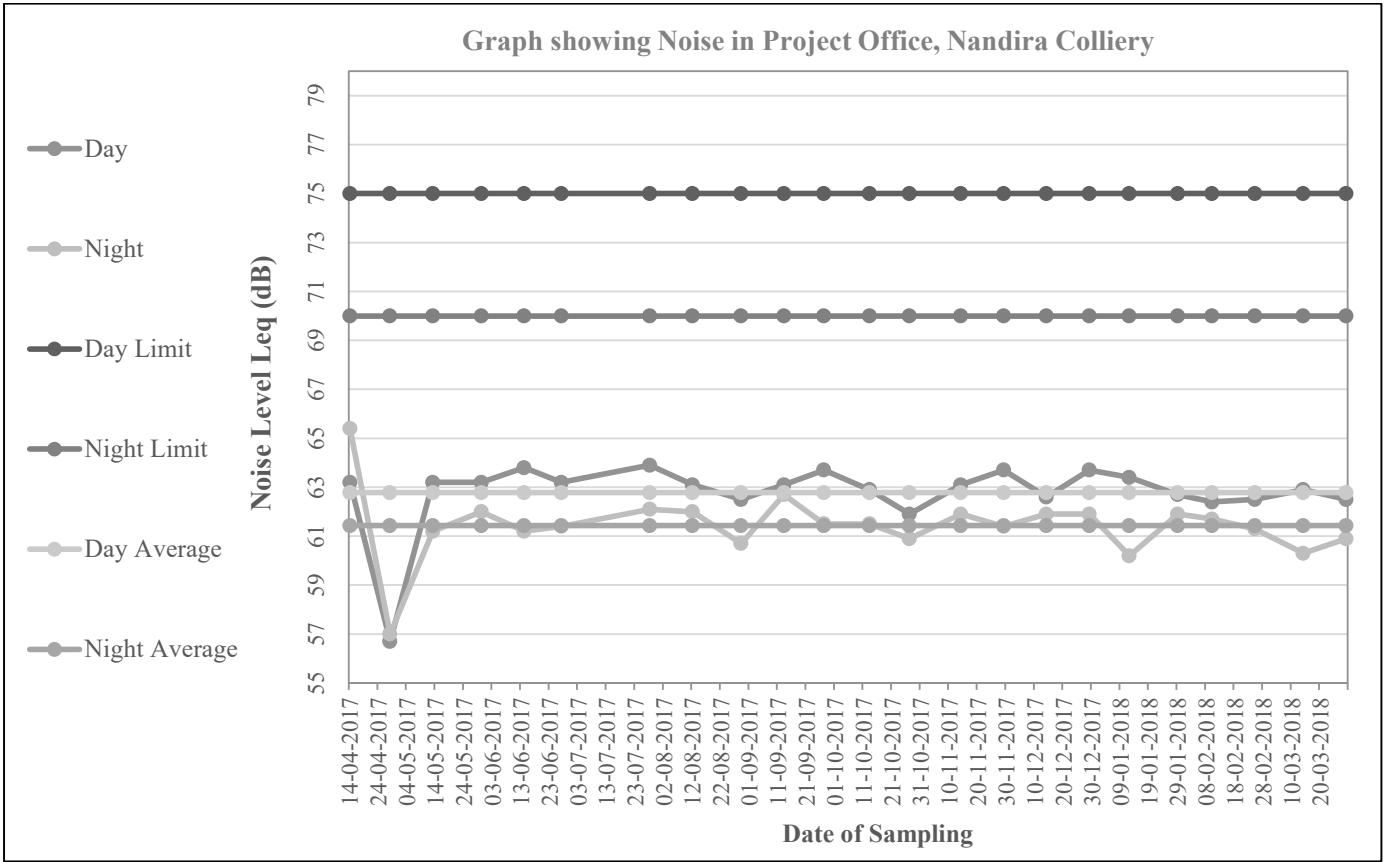


Table: 112**Area: Talcher****Project: Nandira Colliery****Monitoring Station: Sub- Station, Nandira Colliery**

DATE OF SAMPLING	DAY	NIGHT
14/04/2017	66	63.4
28/04/2017	63.4	63.1
13/05/2017	65.4	65.1
30/05/2017	65.8	64.8
14/06/2017	66.5	67.4
27/06/2017	65.8	64.9
28/07/2017	64.5	62.7
12/08/2017	63.7	64.2
29/08/2017	66.2	64.7
14/09/2017	64.2	63.9
27/09/2017	65.2	66.1
13/10/2017	65.6	63.7
27/10/2017	65.5	63.6
14/11/2017	66.7	65.2
29/11/2017	65.9	64.7
14/12/2017	65.7	64.9
29/12/2017	67.1	64.3
12/01/2018	65.8	62.4
29/01/2018	65.2	64.7
10/02/2018	64.7	62.6
25/02/2018	64.7	64.1
14/03/2018	65.1	63.7
29/03/2018	64.9	62.5
Brief Statistic (in dB)	Day	Night
Minimum	63.4	62.4
Maximum	67.1	67.4
Mean	65.4	64.2
Noise Standard	75	70

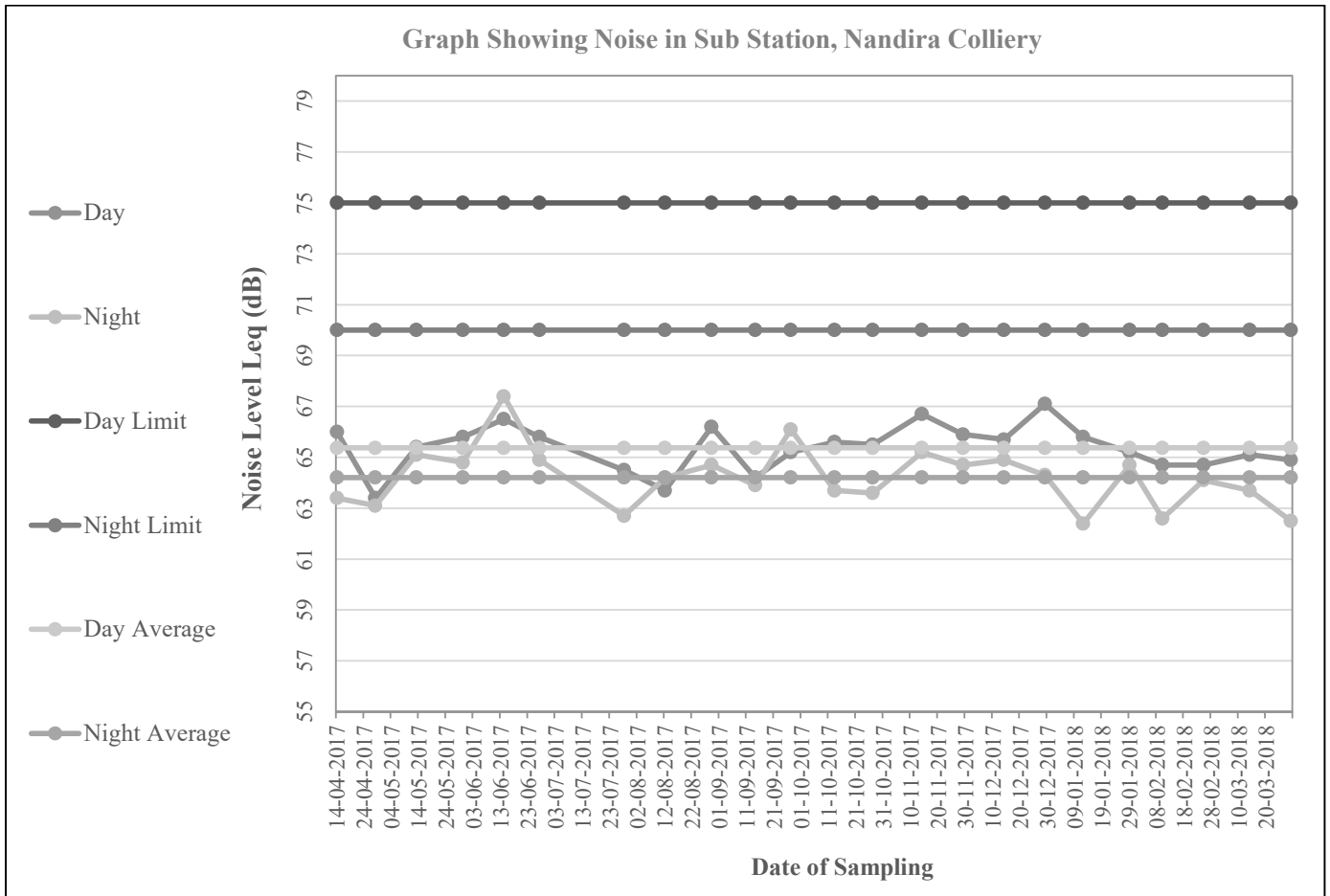


Table: 113

Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Deulbera Colony

DATE OF SAMPLING	DAY	NIGHT
28/04/2017	54	57.1
14/05/2017	62	57.2
30/05/2017	61	58.9
15/06/2017	60	56.8
16/06/2017	60	57.6
14/07/2017	62	56.5
28/07/2017	61	58.9
12/08/2017	60	59.1
29/08/2017	60	57.6
14/09/2017	60	58.3
27/09/2017	60	57.3
13/10/2017	61	57.4
27/10/2017	60	57.3
14/11/2017	61	59.6
29/11/2017	61	57.5
14/12/2017	60	59.3
29/12/2017	61	57.9
12/01/2018	61	59.8
29/01/2018	60	59.1
10/02/2018	60	58.4
25/02/2018	61	56.9
14/03/2018	61	57.8
29/03/2018	60	56.9
Brief Statistic (in dB)	Day	Night
Minimum	54	56.5
Maximum	62	59.8
Mean	60.2	58.0
Noise Standard	75	70

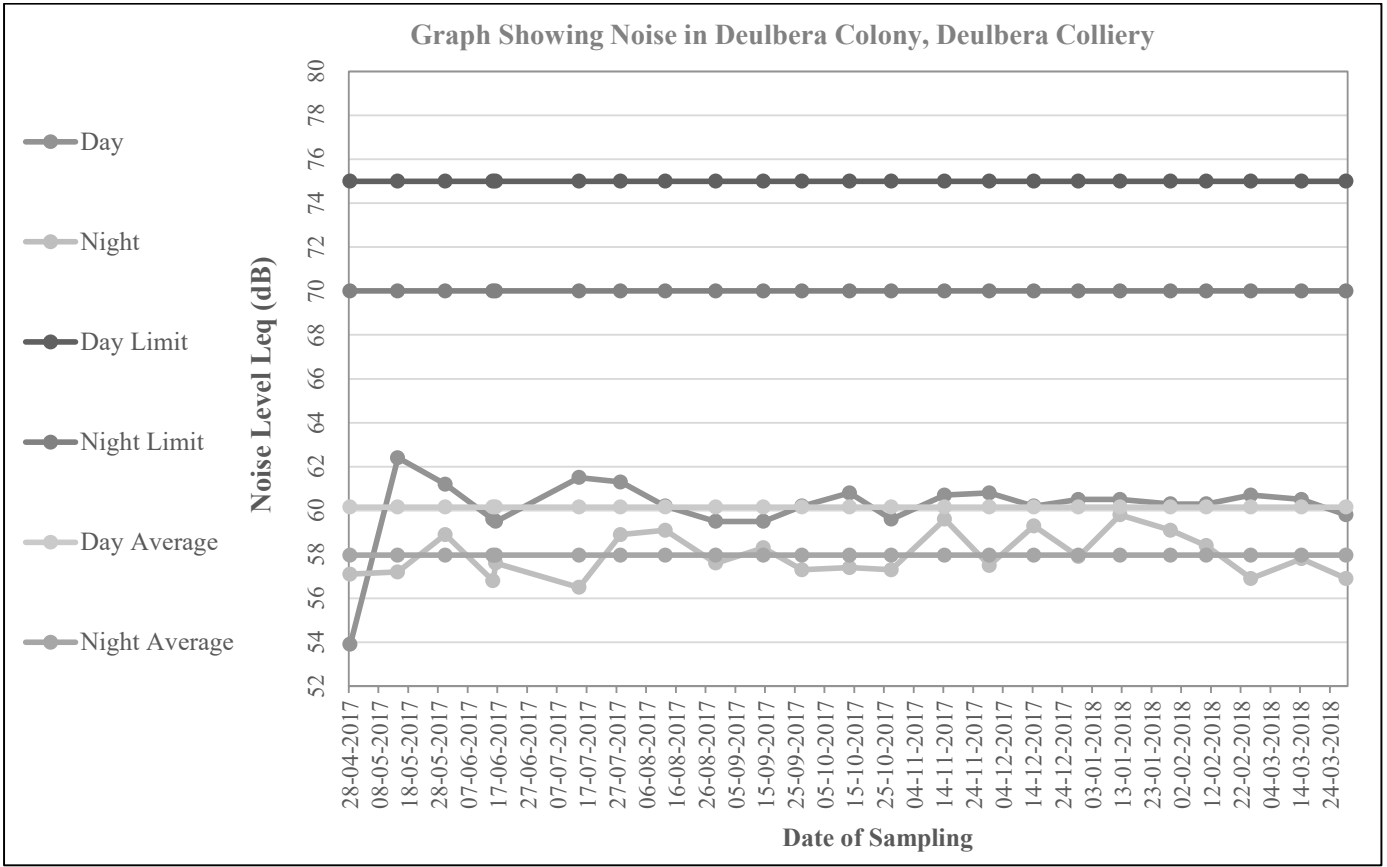


Table: 114

Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Manager's Office

DATE OF SAMPLING	DAY	NIGHT
28/04/2017	63	61.3
14/05/2017	61	56.8
30/05/2017	64	61.3
15/06/2017	63	60.2
16/06/2017	62	60.9
14/07/2017	63	59.9
28/07/2017	62	62.1
12/08/2017	63	60.5
29/08/2017	63	61.4
14/09/2017	62	60.6
27/09/2017	62	60.7
13/10/2017	63	64.3
27/10/2017	62	61
14/11/2017	62	60.9
29/11/2017	63	60.8
14/12/2017	62	60.2
29/12/2017	61	60.2
12/01/2018	62	60.3
29/01/2018	63	62.5
10/02/2018	62	60.9
25/02/2018	63	60.1
14/03/2018	62	60.2
29/03/2018	61	58.6
Brief Statistic (in dB)	Day	Night
Minimum	61	56.8
Maximum	64	64.3
Mean	62.4	60.7
Noise Standard	75	70

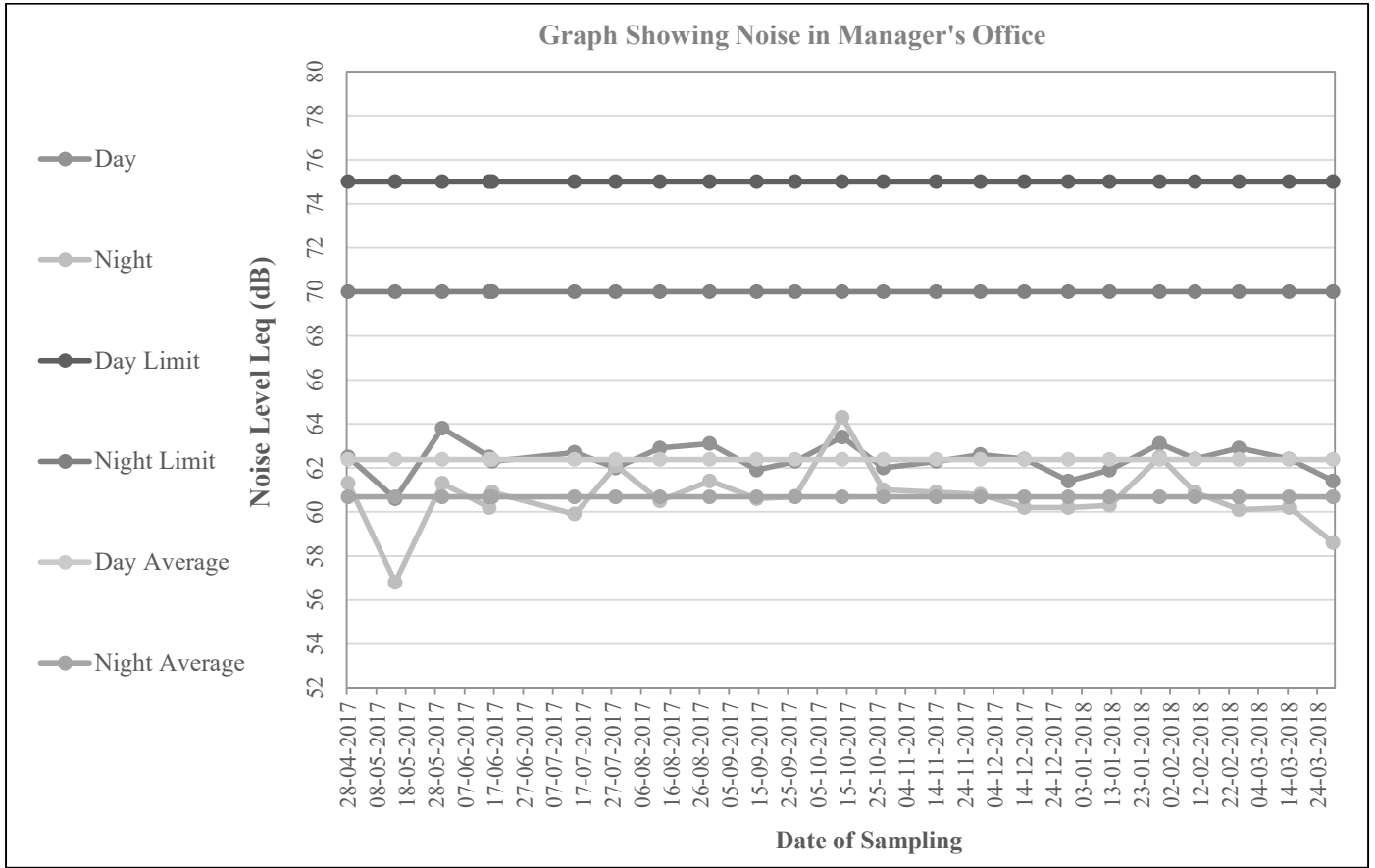


Table: 115**Area: Talcher****Project: Mandapal Sand Mine****Monitoring Station: Near Gopinathpur Village**

DATE OF SAMPLING	DAY	NIGHT
25/04/2017	60	56.9
13/05/2017	60	56.2
30/05/2017	63	59.5
14/06/2017	58	54.7
27/06/2017	62	57.2
14/07/2017	58	57.2
28/07/2017	63	59.7
12/08/2017	60	57.5
29/08/2017	60	57.9
13/09/2017	59	57.6
27/09/2017	58	58.9
06/10/2017	60	56.3
23/10/2017	60	56.6
10/11/2017	60	56.2
25/11/2017	60	59.1
07/12/2017	60	57.4
22/12/2017	60	57.8
04/01/2018	60	58.4
18/01/2018	60	65.4
05/02/2018	61	57.8
20/02/2018	60	56.6
08/03/2018	61	57.2
23/03/2018	59	56.3
Brief Statistic (in dB)	Day	Night
Minimum	58	54.7
Maximum	63	65.4
Mean	60.0	57.8
Noise Standard	75	70

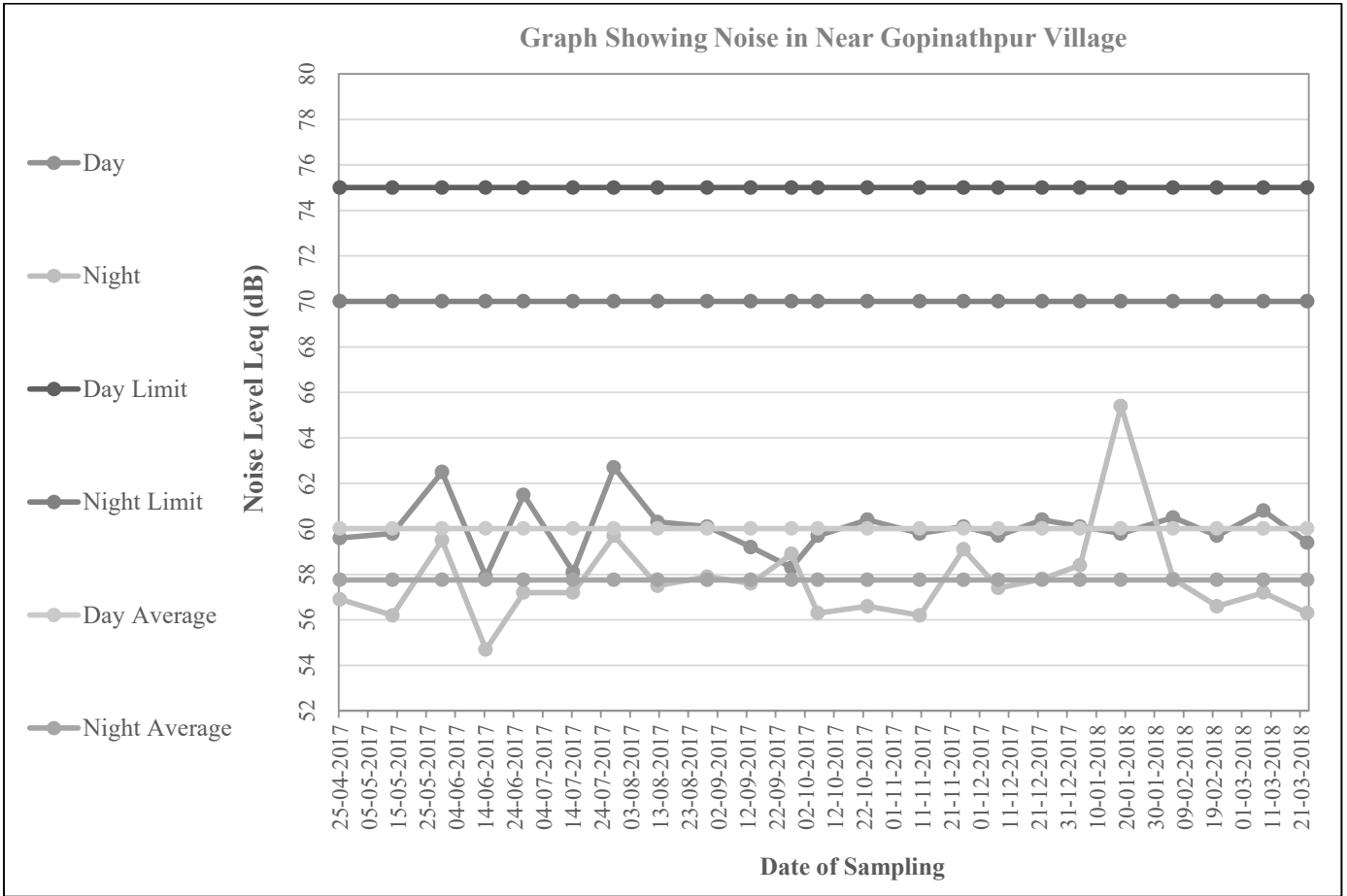
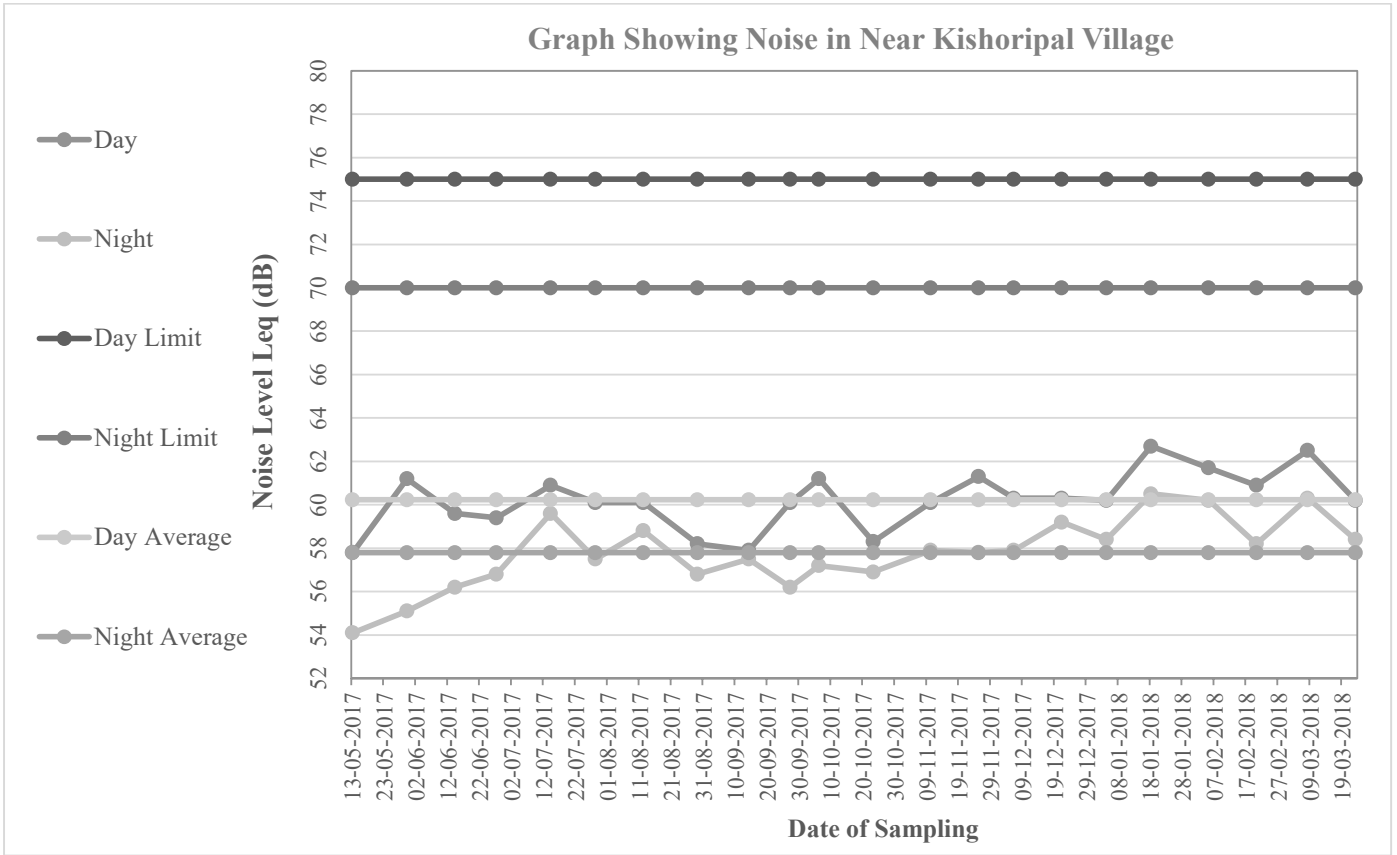


Table: 116

Area: Talcher
Project: Kakudi & Kishoripal
Monitoring Station: Near Kishoripal Village

DATE OF SAMPLING	DAY	NIGHT
13/05/2017	58	54.1
30/05/2017	61	55.1
14/06/2017	60	56.2
27/06/2017	59	56.8
14/07/2017	61	59.6
28/07/2017	60	57.5
12/08/2017	60	58.8
29/08/2017	58	56.8
14/09/2017	58	57.5
27/09/2017	60	56.2
06/10/2017	61	57.2
23/10/2017	58	56.9
10/11/2017	60	57.9
25/11/2017	61	57.8
06/12/2017	60	57.9
21/12/2017	60	59.2
04/01/2018	60	58.4
18/01/2018	63	60.5
05/02/2018	62	60.2
20/02/2018	61	58.2
08/03/2018	63	60.3
23/03/2018	60	58.4
Brief Statistic (in dB)	Day	Night
Minimum	57.8	54.1
Maximum	62.7	60.5
Mean	60.2	57.8
Noise Standard	75	70

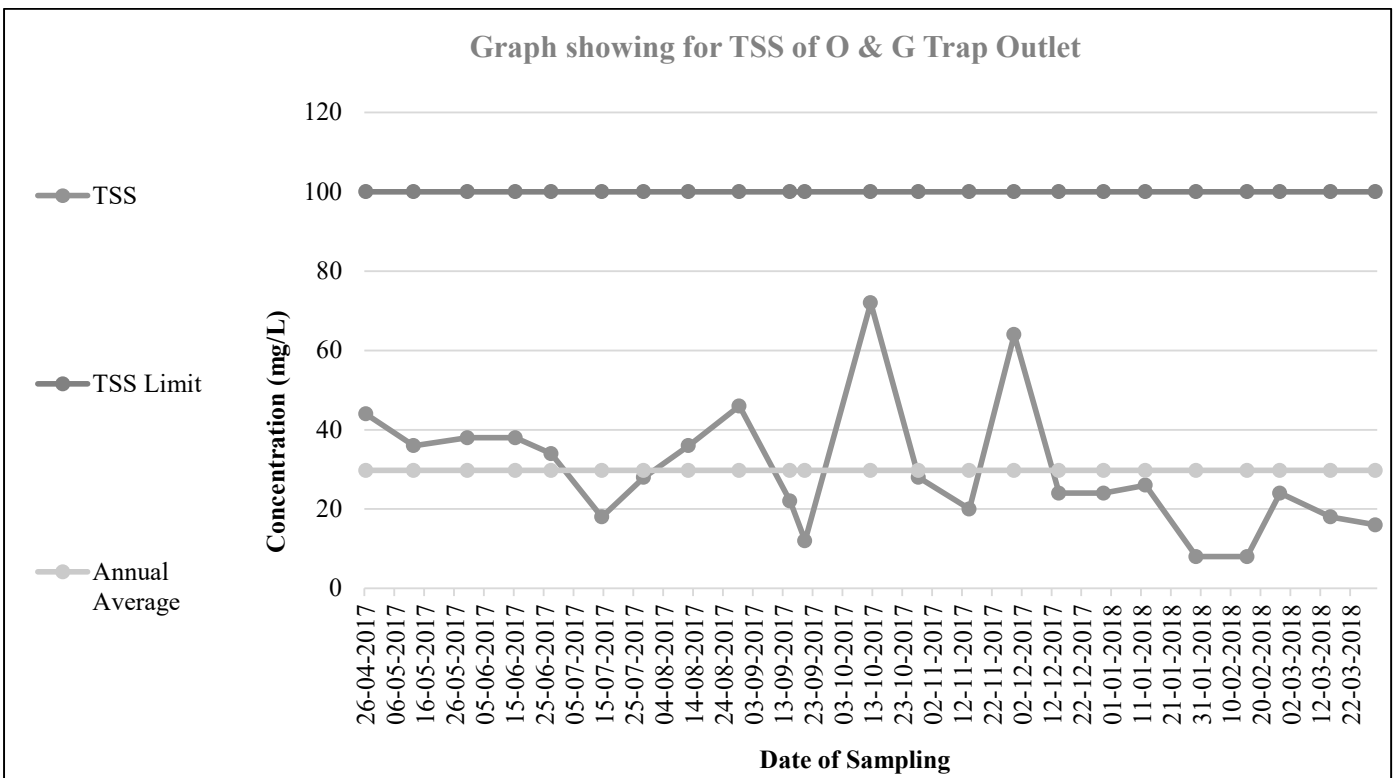
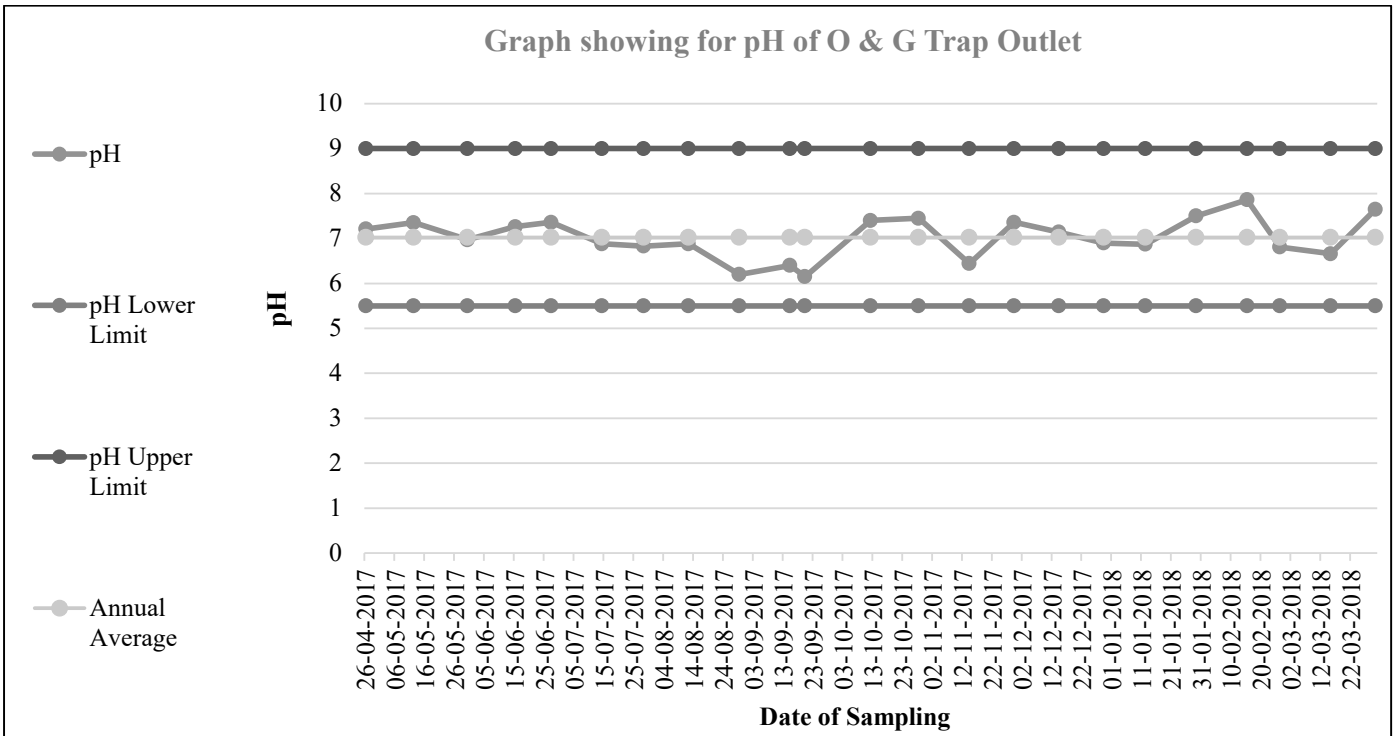


TABLES FOR EFFLUENT WATER QUALITY DATA

Table: 117
Project: Jagannath OCP
Monitoring Station: O & G Trap Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.2	<4.0	44	36
12/05/2017	7.4	<4.0	36	20
30/05/2017	7	<4.0	38	20
15/06/2017	7.3	<4.0	38	28
27/06/2017	7.4	<4.0	34	20
14/07/2017	6.9	<4.0	18	8
28/07/2017	6.8	<4.0	28	12
12/08/2017	6.9	<4.0	36	28
29/08/2017	6.2	<4.0	46	40
15/09/2017	6.4	<4.0	22	16
20/09/2017	6.2	<4.0	12	8
12/10/2017	7.4	<4.0	72	160
28/10/2017	7.5	<4.0	28	20
14/11/2017	6.4	<4.0	20	16
29/11/2017	7.4	<4.0	64	56
14/12/2017	7.1	<4.0	24	16
29/12/2017	6.9	<4.0	24	12
12/01/2018	6.9	<4.0	26	32
29/01/2018	7.5	5.6	8	8
15/02/2018	7.9	4.8	8	12
26/02/2018	6.8	6	24	16
15/03/2018	6.7	9	18	16
30/03/2018	7.7	5.6	16	8

All values are in mg/L except pH



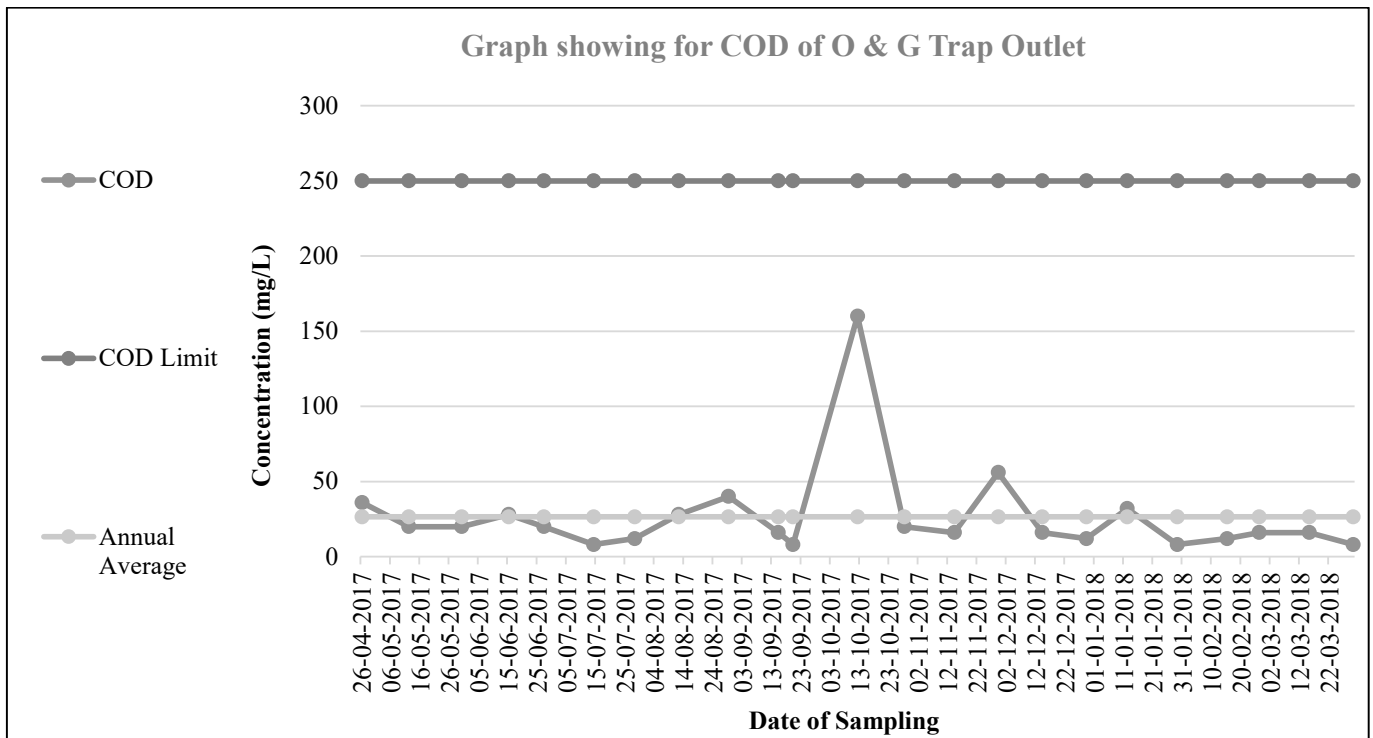


Table: 118
Project: Jagannath OCP
Monitoring Station: O & G Trap Inlet

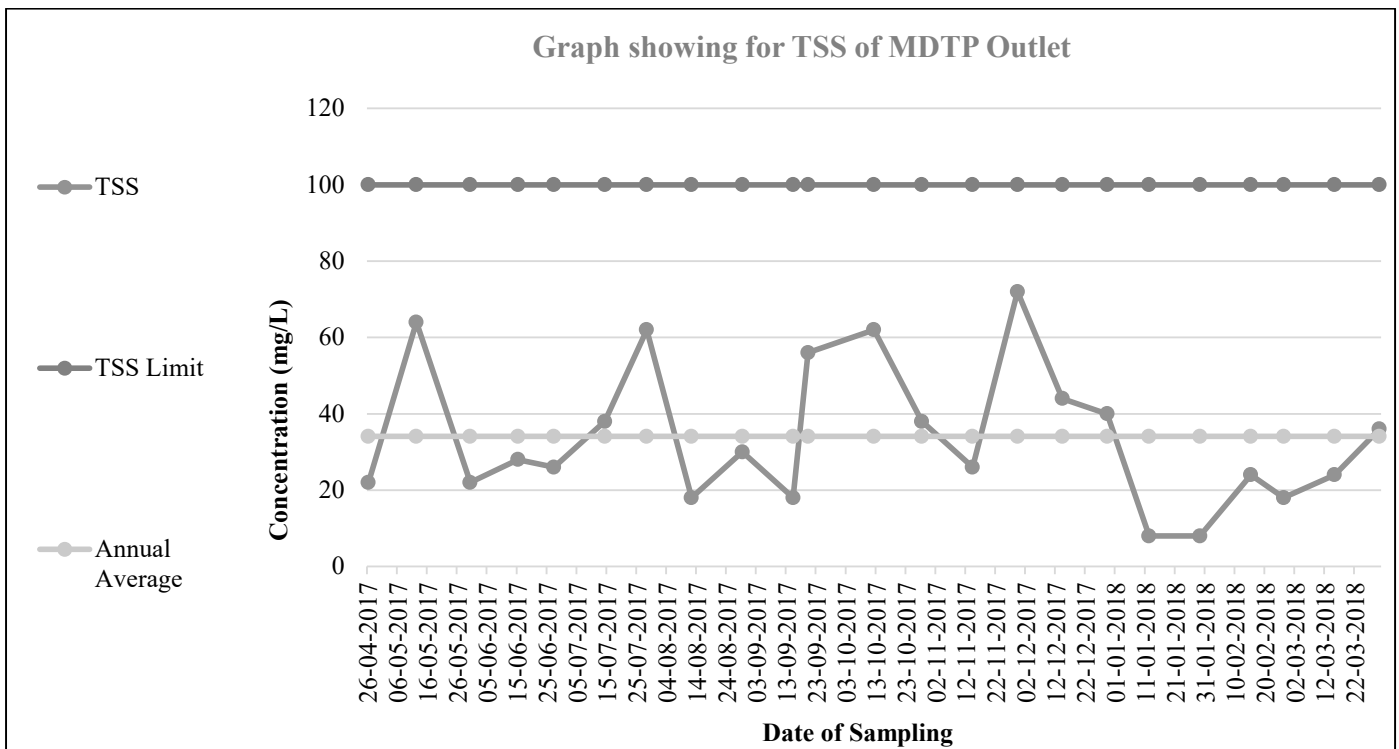
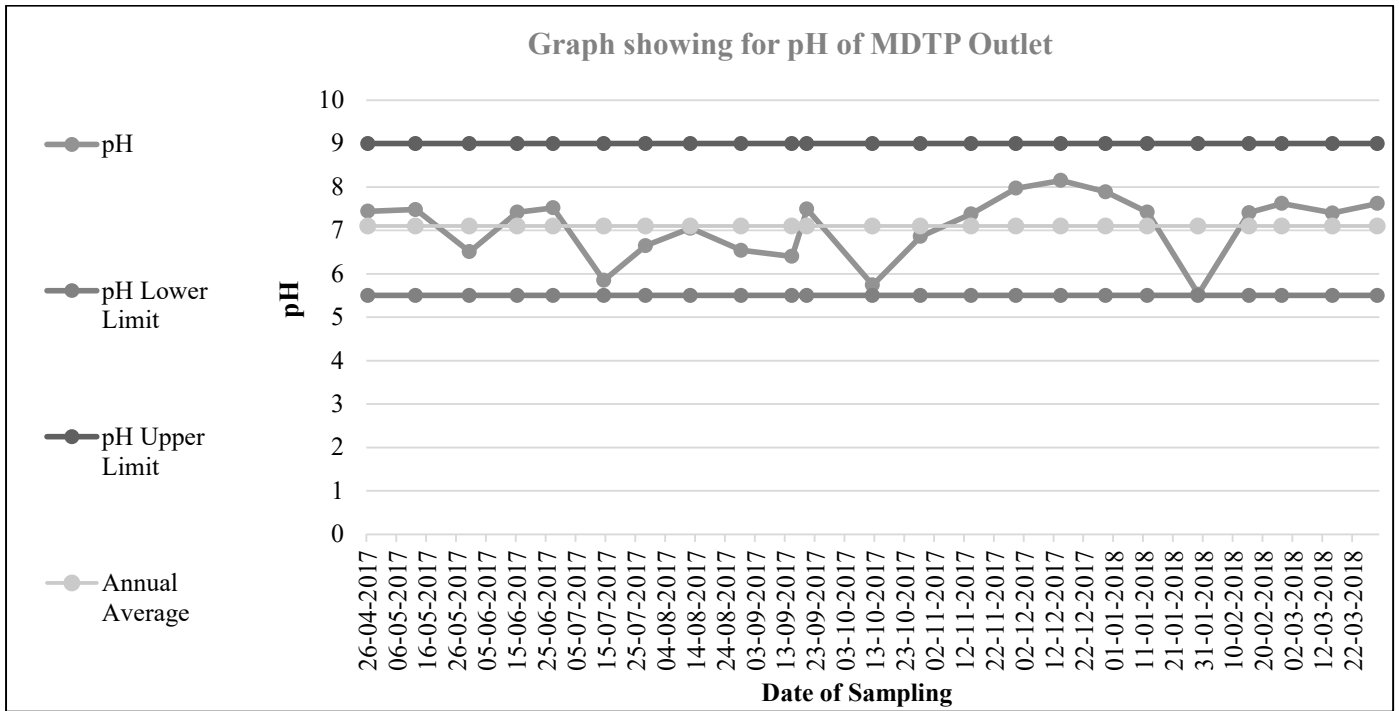
Date of Sampling	pH	Oil & Grease	TSS	COD
15/09/2017	6.5	<4.0	32	24
14/12/2017	7.3	<4.0	32	24
15/06/2017	7.3	<4.0	124	320
15/03/2018	6.7	10.4	46	20

All values are in mg/L except pH

Table: 119
Project: Jagannath OCP
Monitoring Station: MDTP Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD	BOD
26/04/2017	7.4	<4.0	22	8	
12/05/2017	7.5	<4.0	64	52	
30/05/2017	6.5	<4.0	22	52	8
15/06/2017	7.4	<4.0	28	16	
27/06/2017	7.5	<4.0	26	12	
14/07/2017	5.9	<4.0	38	28	
28/07/2017	6.7	<4.0	62	48	
12/08/2017	7.1	<4.0	18	12	
29/08/2017	6.5	<4.0	30	24	
15/09/2017	6.4	<4.0	18	8	
20/09/2017	7.5	<4.0	56	44	
12/10/2017	5.7	<4.0	62	56	
28/10/2017	6.9	<4.0	38	24	
14/11/2017	7.4	<4.0	26	20	
29/11/2017	8	<4.0	72	68	
14/12/2017	8.2	<4.0	44	32	
29/12/2017	7.9	<4.0	40	20	
12/01/2018	7.4	6.6	8	32	
29/01/2018	5.5	<4.0	8	12	
15/02/2018	7.4	<4.0	24	56	
26/02/2018	7.6	3.4	18	24	
15/03/2018	7.4	10.8	24	16	
30/03/2018	7.6	4.2	36	72	

All values are in mg/L except pH



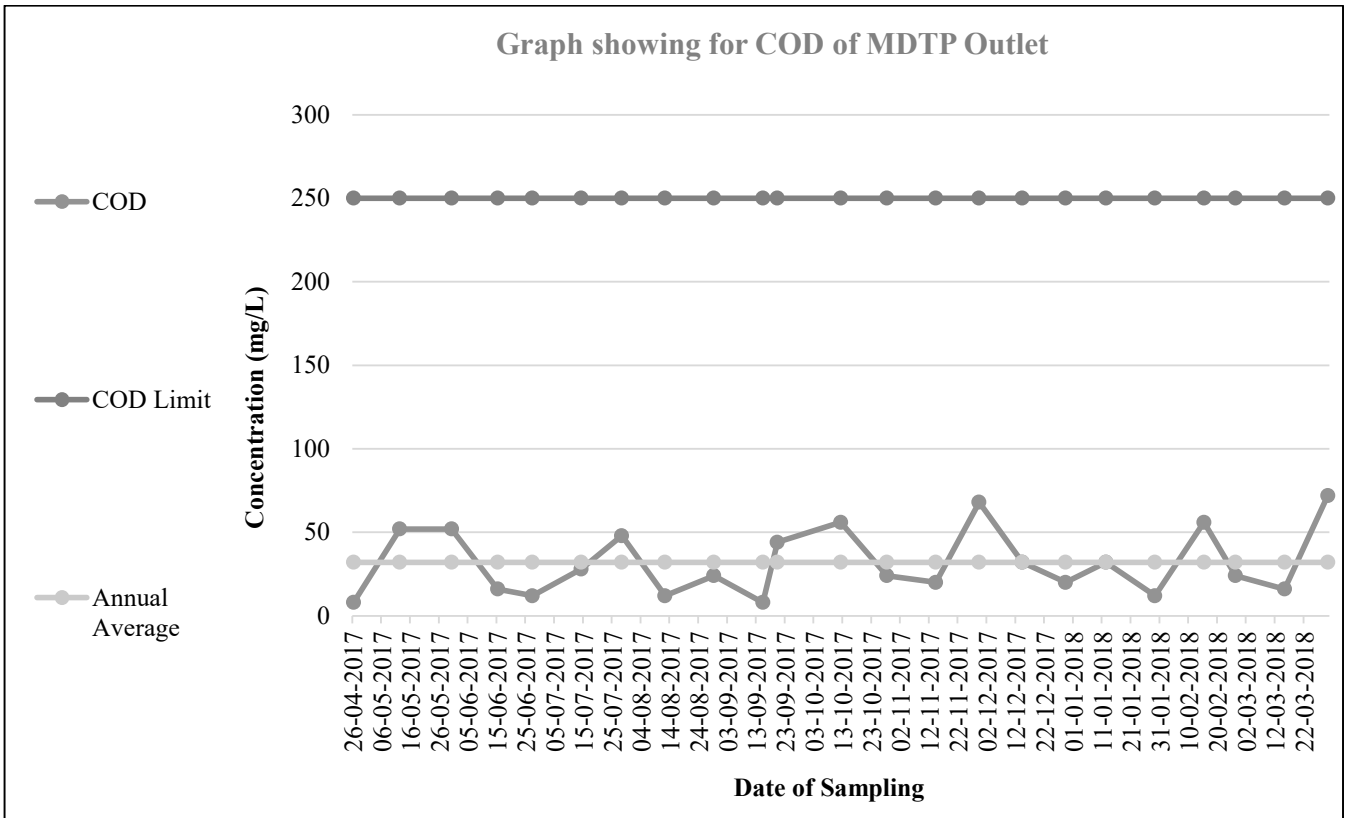


Table: 120
Project: Jagannath OCP
Monitoring Station: MDTP Intlet

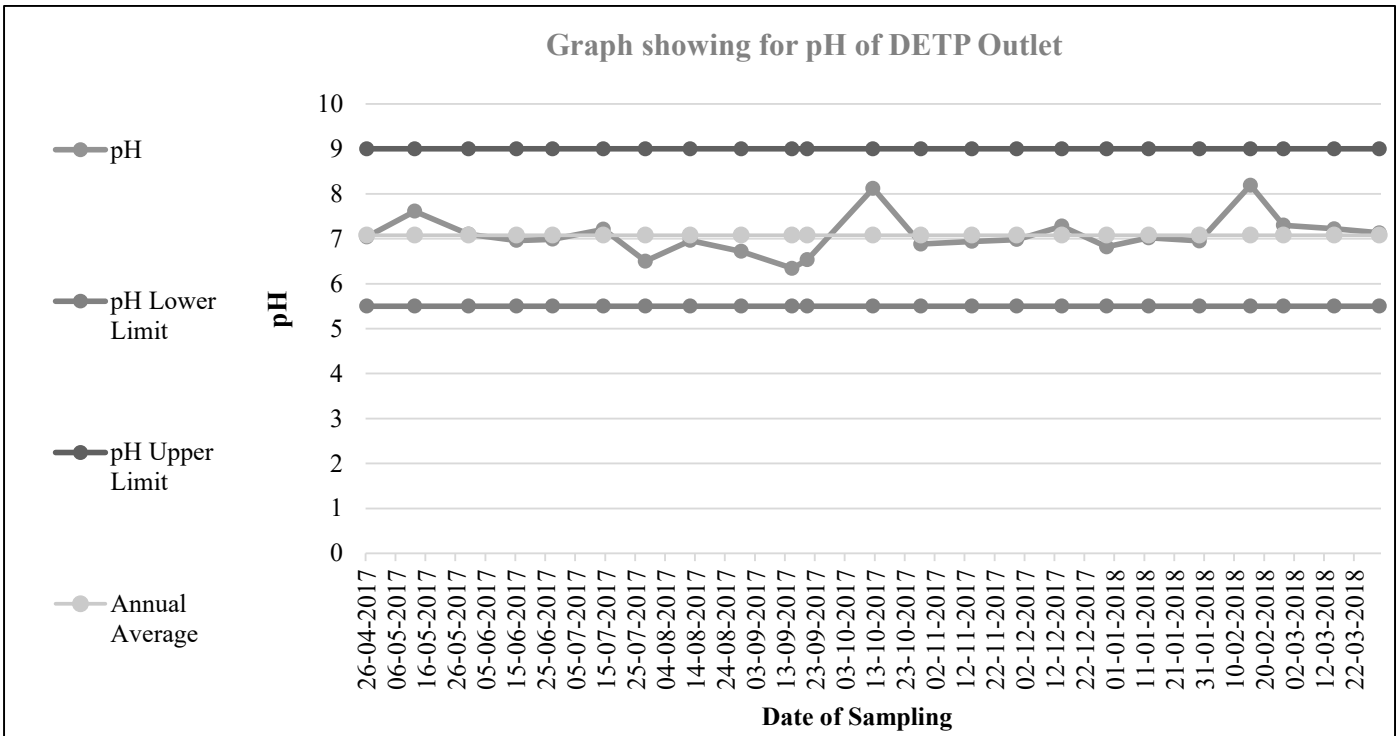
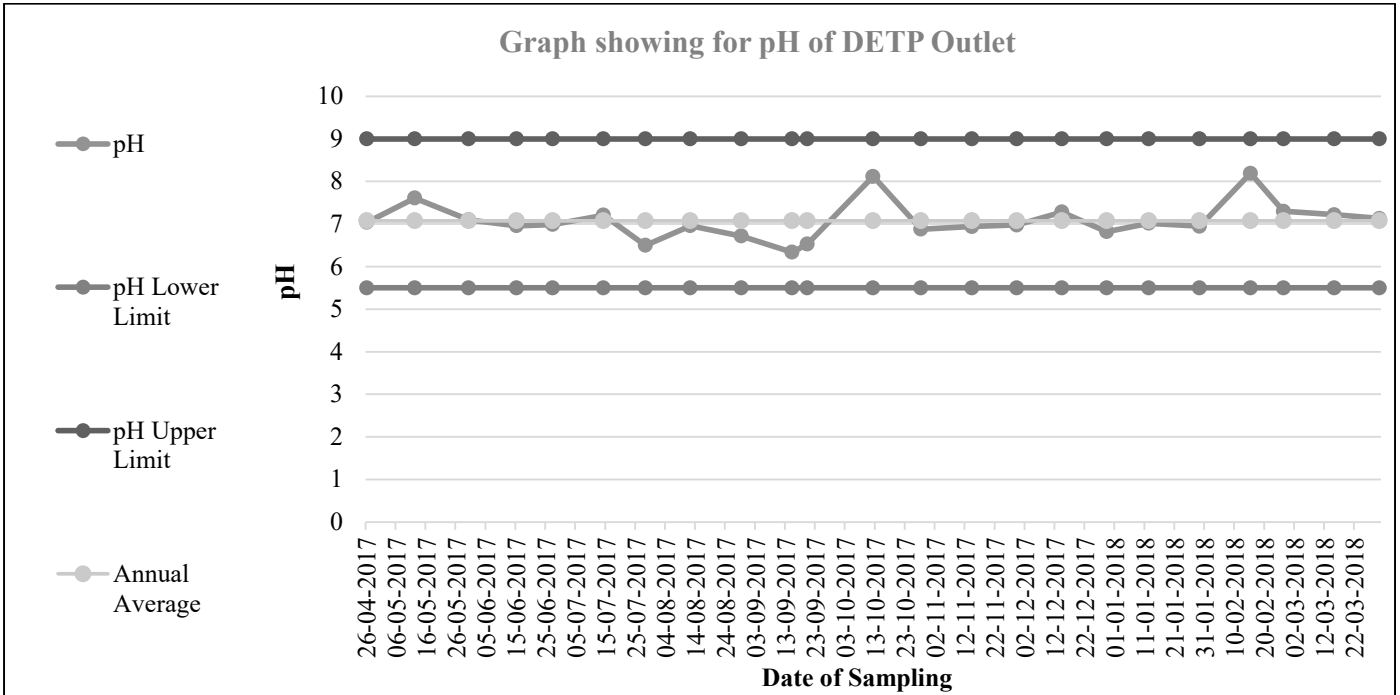
Date of Sampling	pH	Oil & Grease	TSS	COD
15/06/2017	6.9	<4.0	22	8
15/09/2017	6.4	<4.0	52	40
14/12/2017	7.6	<4.0	78	72
15/03/2018	7.4	6.6	16	8

All values are in mg/L except *p*

Table: 121
Project: Jagannath OCP
Monitoring Station: DETP Outlet

Date of Sampling	pH	TSS	COD	BOD
14/07/2017	7.2	36		2.8
28/07/2017	6.5	32		3.2
12/08/2017	7	42		8
29/08/2017	6.7	12		3.8
15/09/2017	6.3	38		2.4
20/09/2017	6.5	28		3
12/10/2017	8.1	22		3.9
28/10/2017	6.9	28		3.6
14/11/2017	6.9	16		2.7
29/11/2017	7	20		3
14/12/2017	7.3	20		3.5
29/12/2017	6.8	32		3.4
12/01/2018	7	8		3
29/01/2018	7	14		3
15/02/2018	8.2	18		4.2
26/02/2018	7.3	32		2.8
15/03/2018	7.2	32		2
30/03/2018	7.1	24		2.2
26/04/2017	7	22		4.4
12/05/2017	7.6	28		4.2
30/05/2017	7.1	44	4.6	4.2
15/06/2017	7	68		4.6
27/06/2017	7	42		4.2

All values are in mg/L except pH



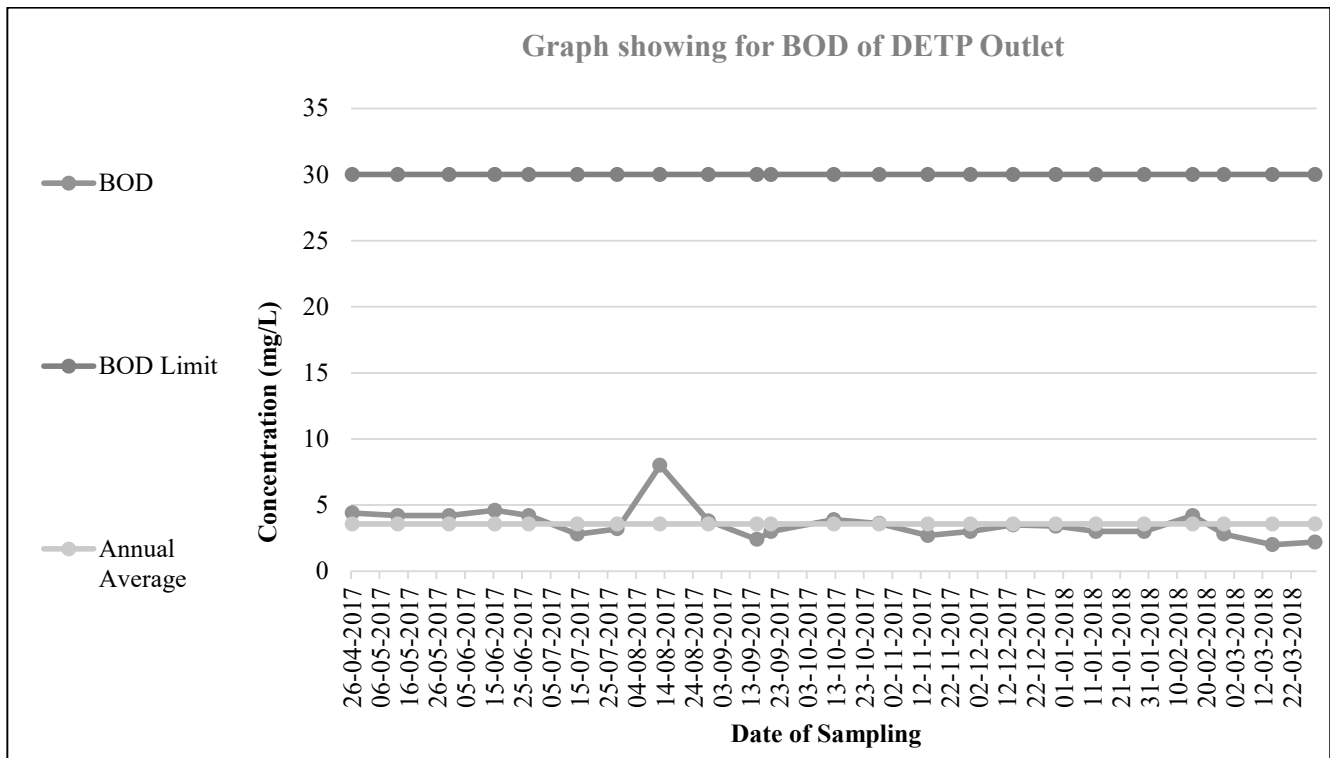


Table: 122
Project: Jagannath OCP
Monitoring Station: DETP Inlet

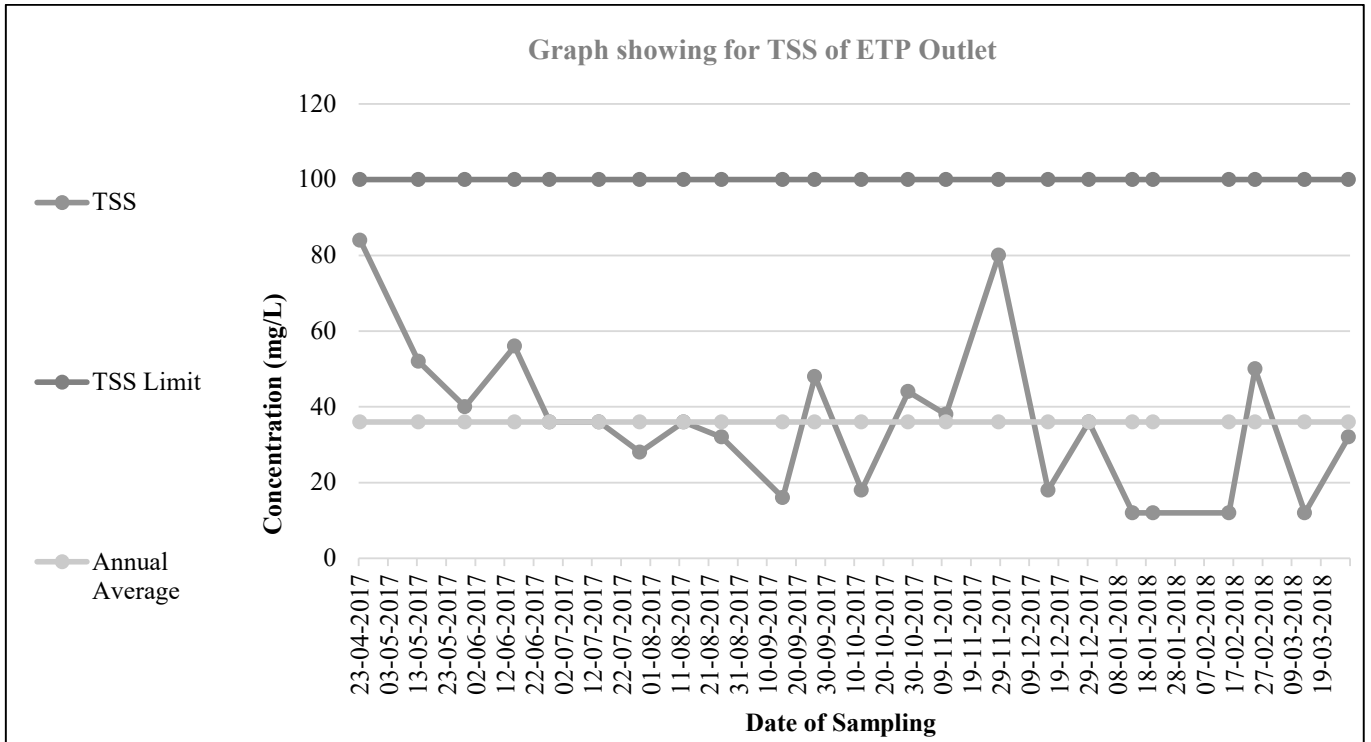
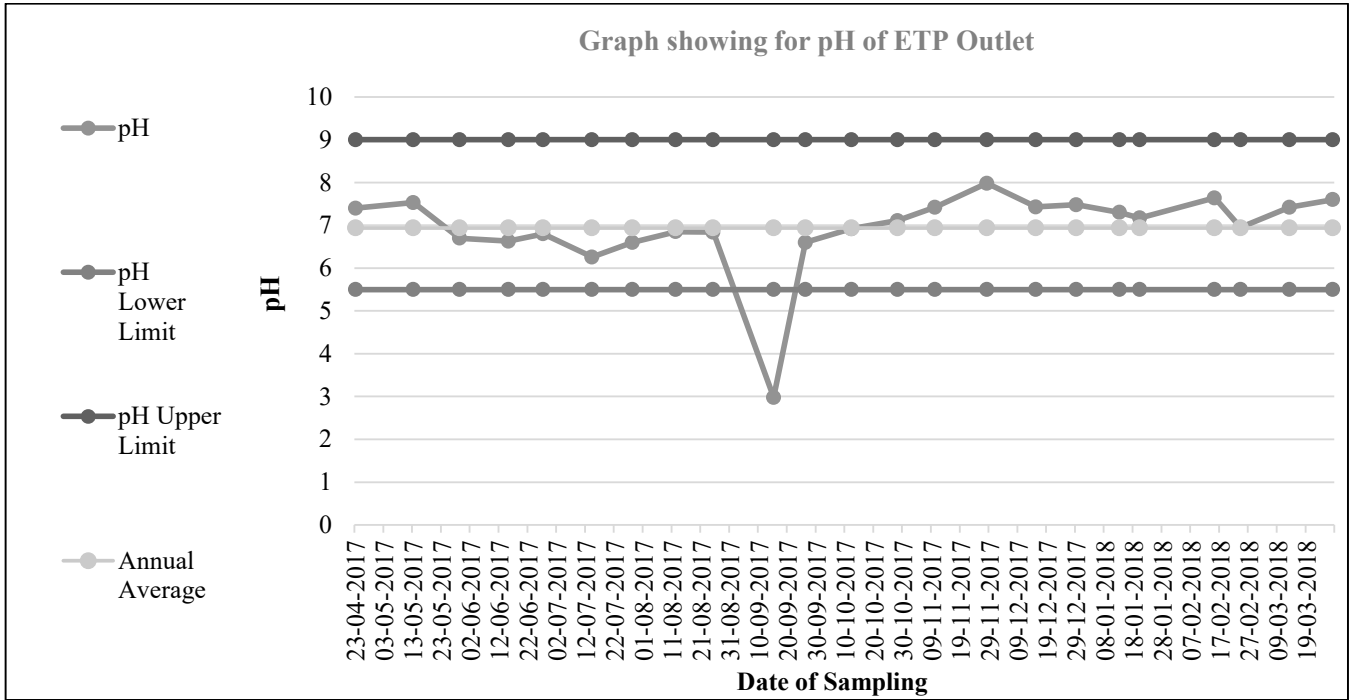
Date of Sampling	pH	Oil & Grease	TSS
15/06/2017	6.3	44	3.6
15/09/2017	6.9	20	3.6
14/12/2017	7.1	54	3.4
15/03/2018	6.9	24	4.2

All values are in mg/L except pH

Table: 123
Project: Bhubaneswari OCP
Monitoring Station: ETP Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
23/04/2017	7.4	<4.1	84	72
13/05/2017	7.5	<4.1	52	48
29/05/2017	6.7	<4.1	40	24
12/08/2017	6.9	<4.0	36	28
25/08/2017	6.8	<4.0	32	12
15/09/2017	3	<4.0	16	8
26/09/2017	6.6	<4.0	48	36
12/10/2017	6.9	<4.0	18	12
28/10/2017	7.1	<4.0	44	32
10/11/2017	7.4	<4.0	38	32
28/11/2017	8	<4.0	80	160
15/12/2017	7.4	<4.0	18	8
29/12/2017	7.5	<4.0	36	28
13/01/2018	7.3	6.6	12	24
20/01/2018	7.2	5.2	12	88
15/02/2018	7.6	4.4	12	56
24/02/2018	7	2.8	50	72
13/03/2018	7.4	9.8	12	16
15/06/2017	6.6	<4.0	56	40
27/06/2017	6.8	<4.0	36	28
14/07/2017	6.3	<4.0	36	24
28/07/2017	6.6	<4.0	28	16
28/03/2018	7.6	6.4	32	20

All values are in mg/L except pH



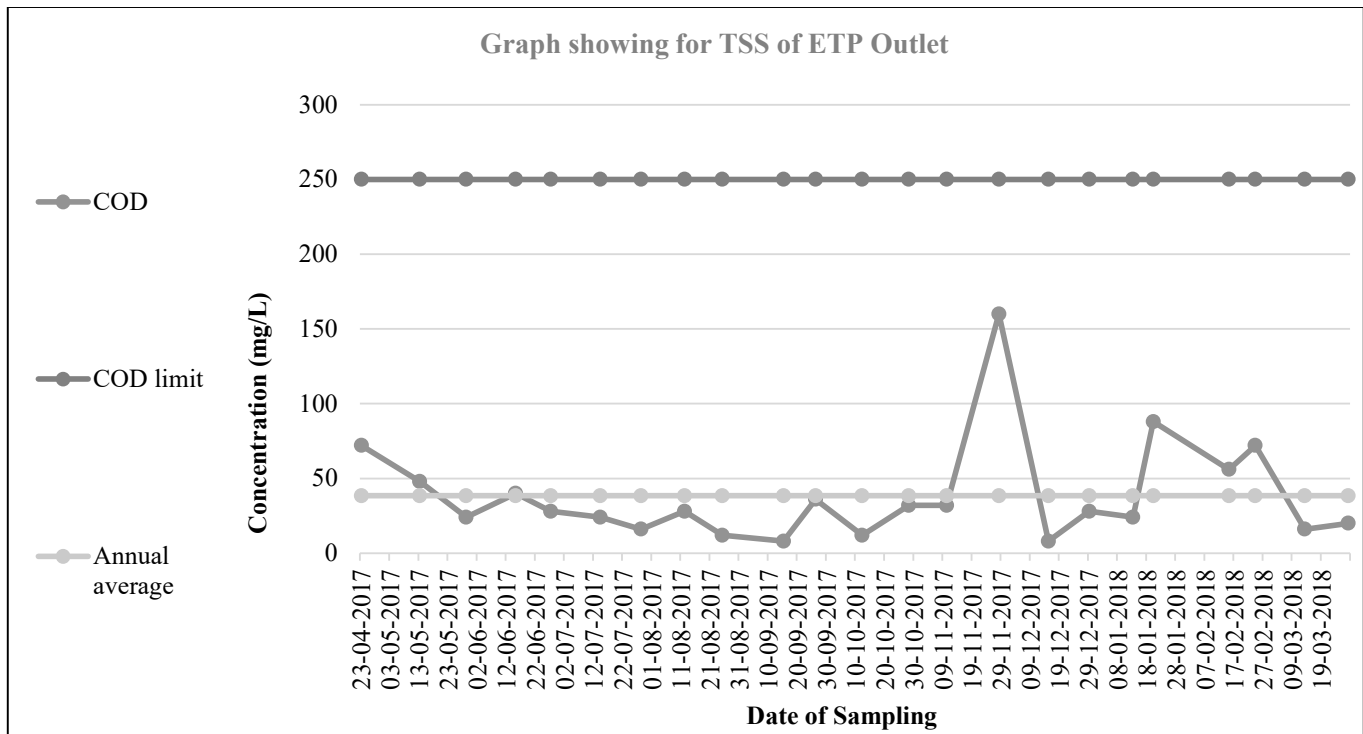


Table: 124
Project: Bhubaneswari OCP
Monitoring Station: ETP Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
23/04/2017	7.15	<4.0	52	28
12/10/2017	7.7	<4.0	84	200
13/01/2018	6.6	16	58	480
13/03/2018	7.44	10	36	24
14/07/2017	5.95	<4.0	58	44

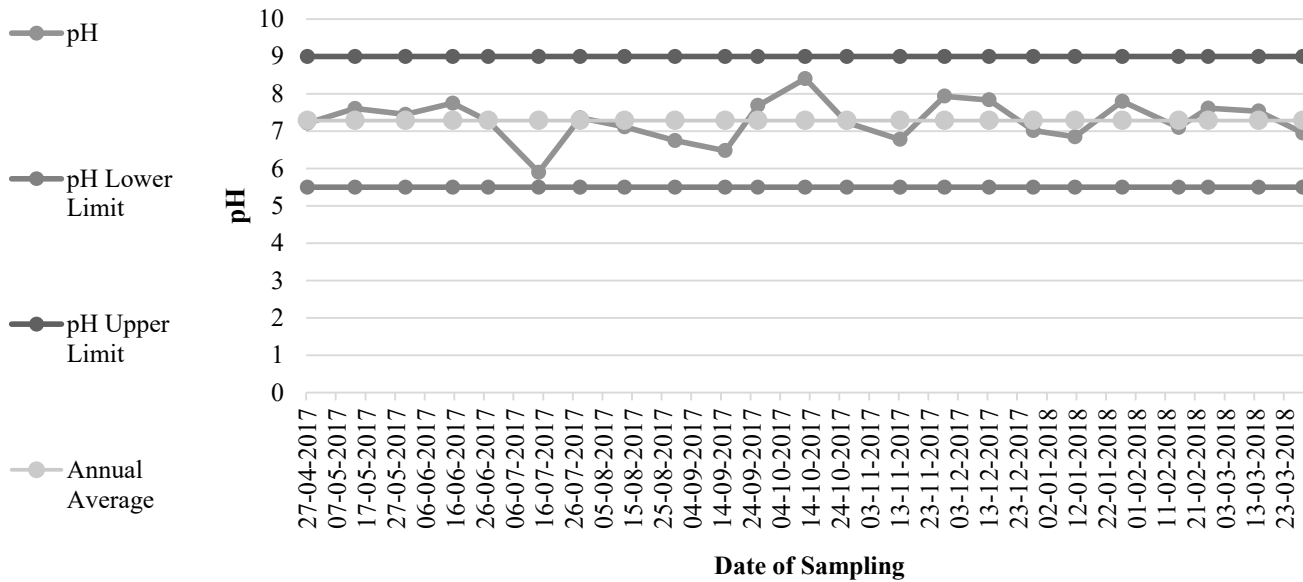
All values are in mg/L except pH

Table: 125
Project: Ananta OCP
Monitoring Station: DETP Outlet

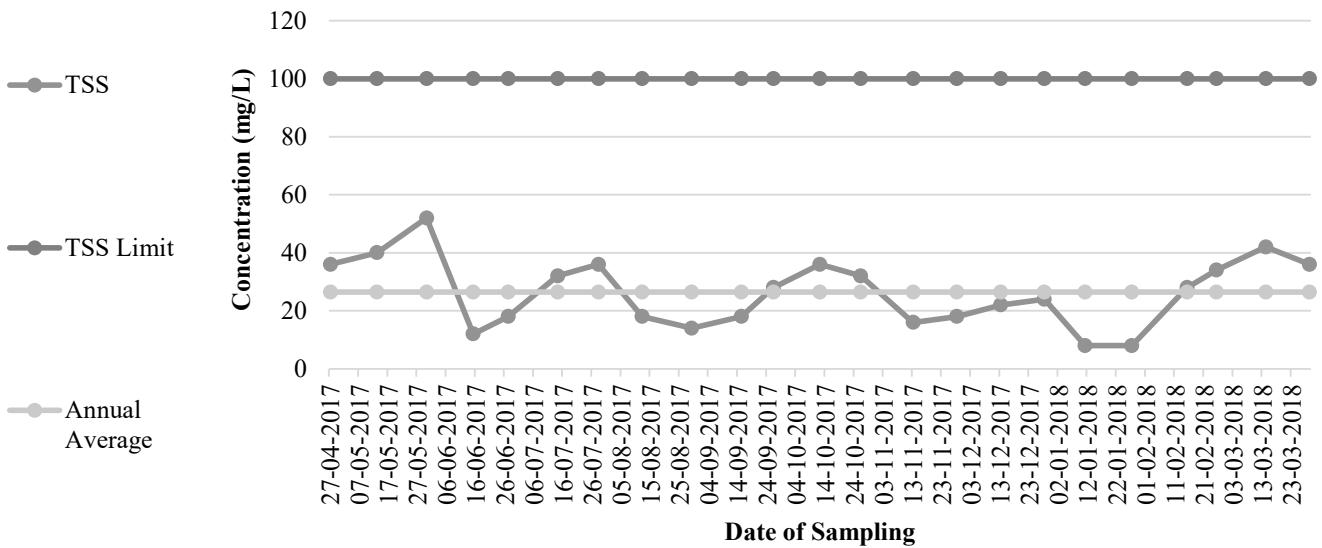
Date of Sampling	pH	TSS	BOD
27/04/2017	7.22	36	3.2
13/05/2017	7.61	40	3.8
30/05/2017	7.45	52	4.8
15/06/2017	7.75	12	4.2
27/06/2017	7.27	18	3.4
14/07/2017	5.9	32	3.8
28/07/2017	7.36	36	3.6
12/08/2017	7.12	18	4.4
29/08/2017	6.75	14	2.8
15/09/2017	6.48	18	2
26/09/2017	7.69	28	3.2
12/10/2017	8.41	36	4.5
26/10/2017	7.24	32	3
13/11/2017	6.78	16	2.2
28/11/2017	7.94	18	2.8
13/12/2017	7.84	22	3.2
28/12/2017	7.02	24	3.6
11/01/2018	6.85	8	3.1
27/01/2018	7.8	8	1.2
15/02/2018	7.1	28	2.8
25/02/2018	7.62	34	2.6
14/03/2018	7.54	42	2.4
29/03/2018	6.95	36	2

All values are in mg/L except pH

Graph showing for pH of DETP Outlet



Graph showing for TSS of DETP Outlet



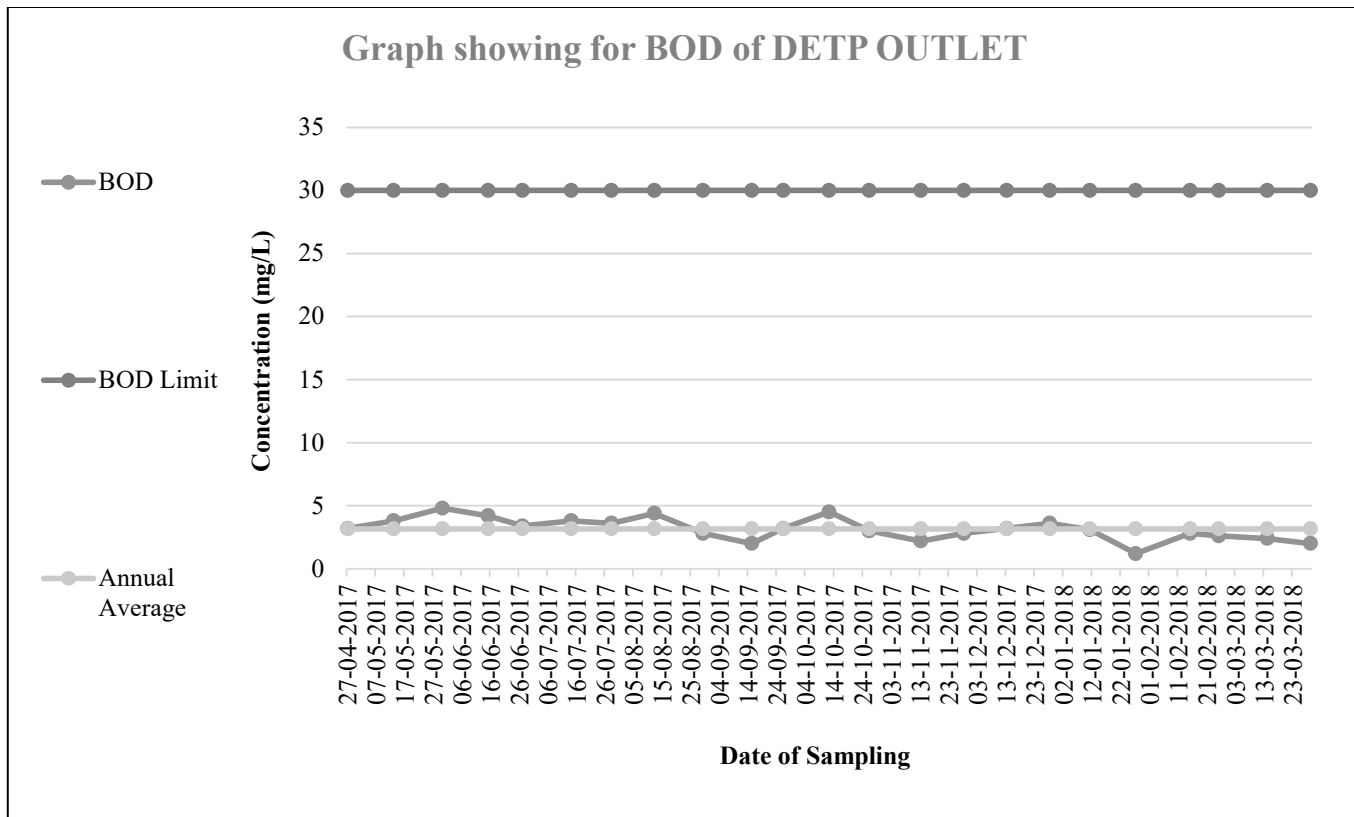


Table: 126
Project: Ananta OCP
Monitoring Station: DETP Inlet

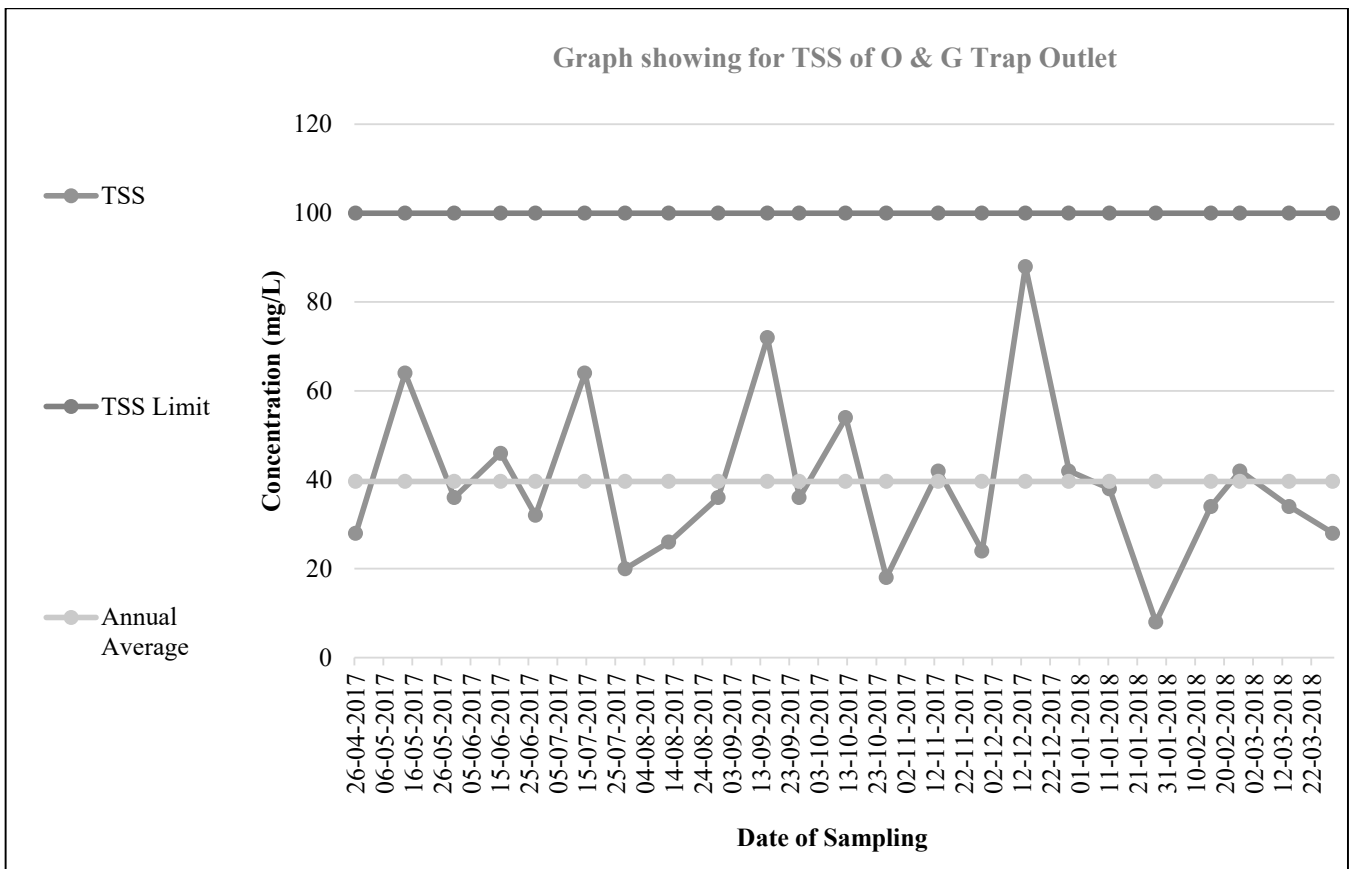
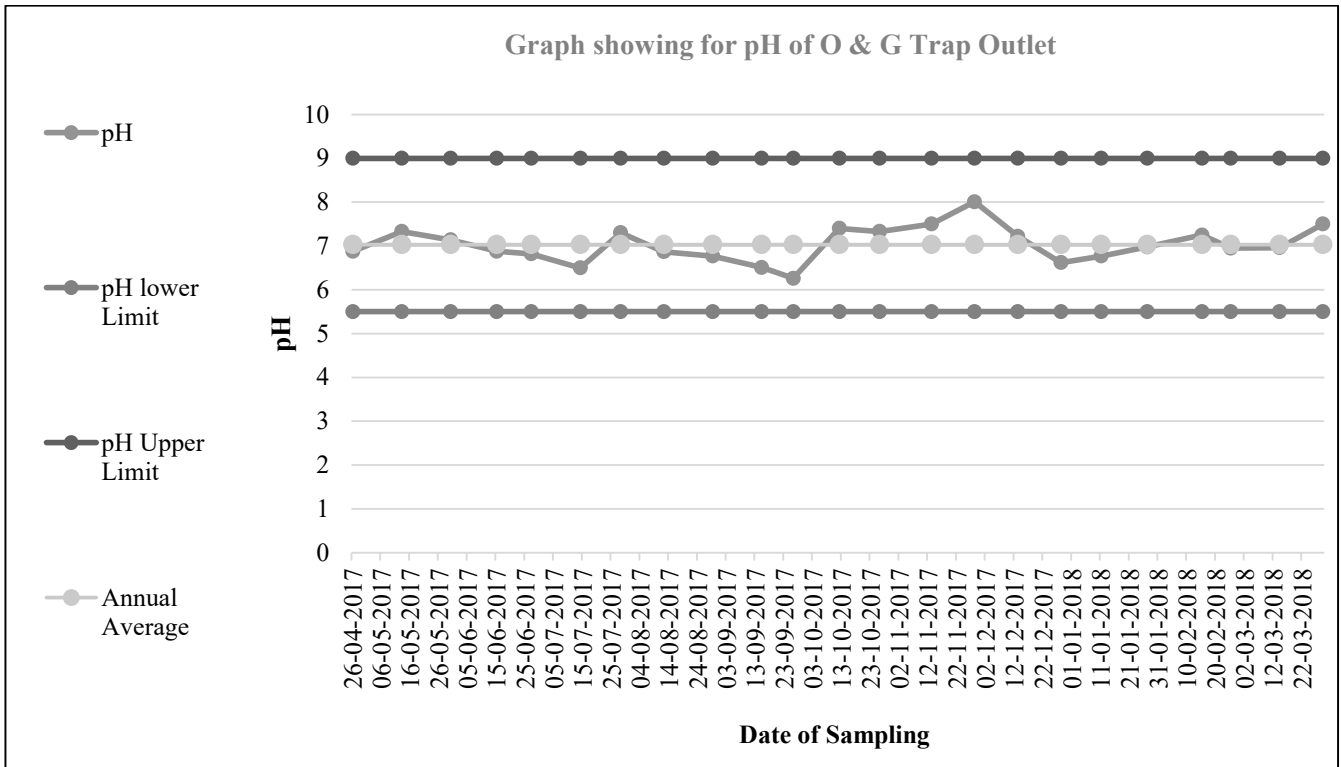
Date of Sampling	pH	TSS	BOD
14/03/2018	6.98	28	2.1
15/09/2017	6.55	22	2.1

All values are in mg/L except pH

Table: 127
Project: Ananta OCP
Monitoring Station: O & G Trap Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	6.88	<4.0	28	20
13/05/2017	7.33	<4.0	64	48
30/05/2017	7.14	<4.0	36	20
15/06/2017	6.88	<4.0	46	36
27/06/2017	6.82	<4.0	32	20
14/07/2017	6.5	<4.0	64	56
28/07/2017	7.3	<4.0	20	12
12/08/2017	6.87	<4.0	26	20
29/08/2017	6.77	<4.0	36	24
15/09/2017	6.51	<4.0	72	60
26/09/2017	6.26	<4.0	36	24
12/10/2017	7.4	<4.0	54	160
26/10/2017	7.33	<4.0	18	12
13/11/2017	7.5	<4.0	42	36
28/11/2017	8.01	<4.0	24	12
13/12/2017	7.22	<4.0	88	76
28/12/2017	6.62	<4.0	42	32
11/01/2018	6.77	<4.0	38	44
27/01/2018	6.98	22.2	8	24
15/02/2018	7.25	6.4	34	60
25/02/2018	6.95	3.6	42	12
14/03/2018	6.96	9.6	34	24
29/03/2018	7.5	12	28	24

All values are in mg/L except pH



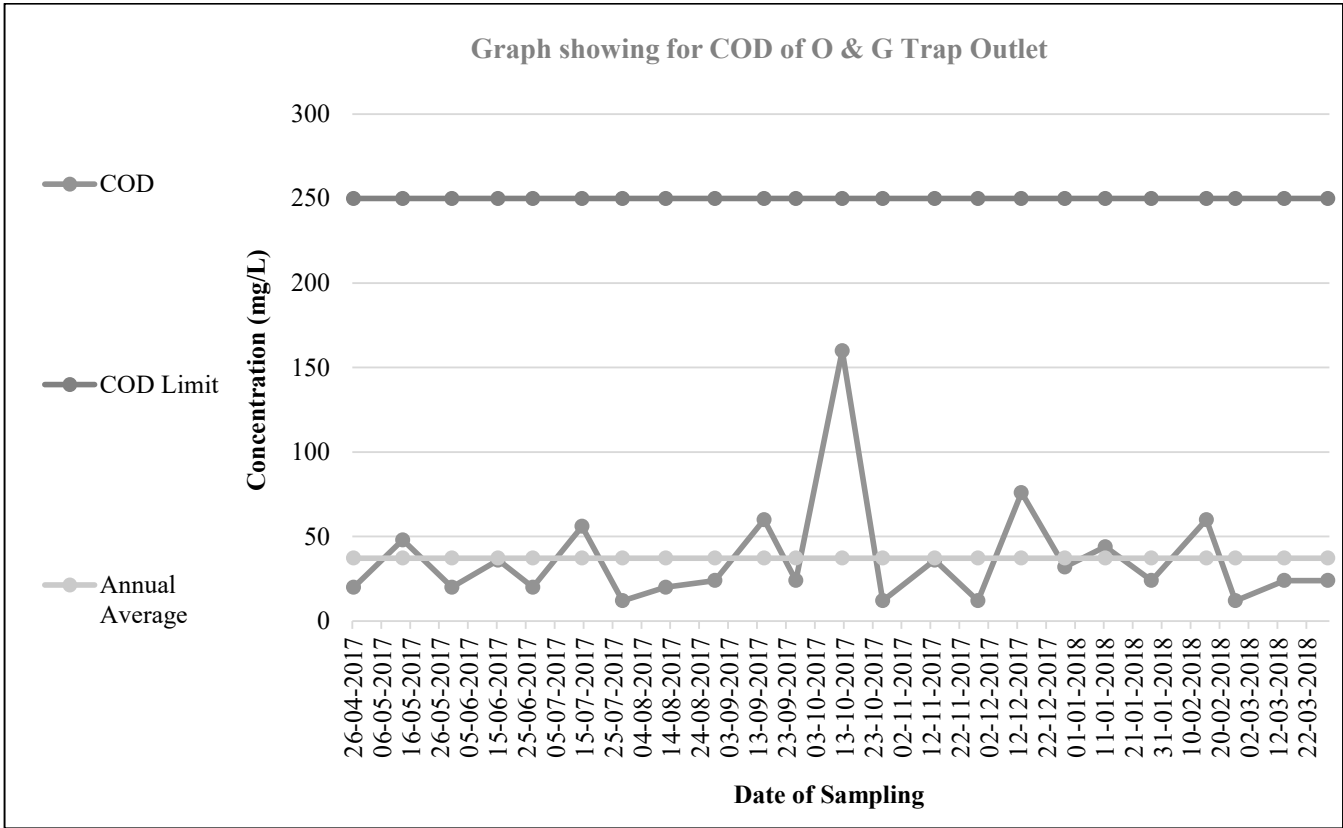


Table: 128
Project: Ananta OCP
Monitoring Station: O & G Trap Inlet

Date of Sampling	pH	Oil & Grease	TSS	COD
14/03/2018	6.85	9.8	24	12
15/09/2017	6.46	<4.0	74	68

All values are in mg/L except pH

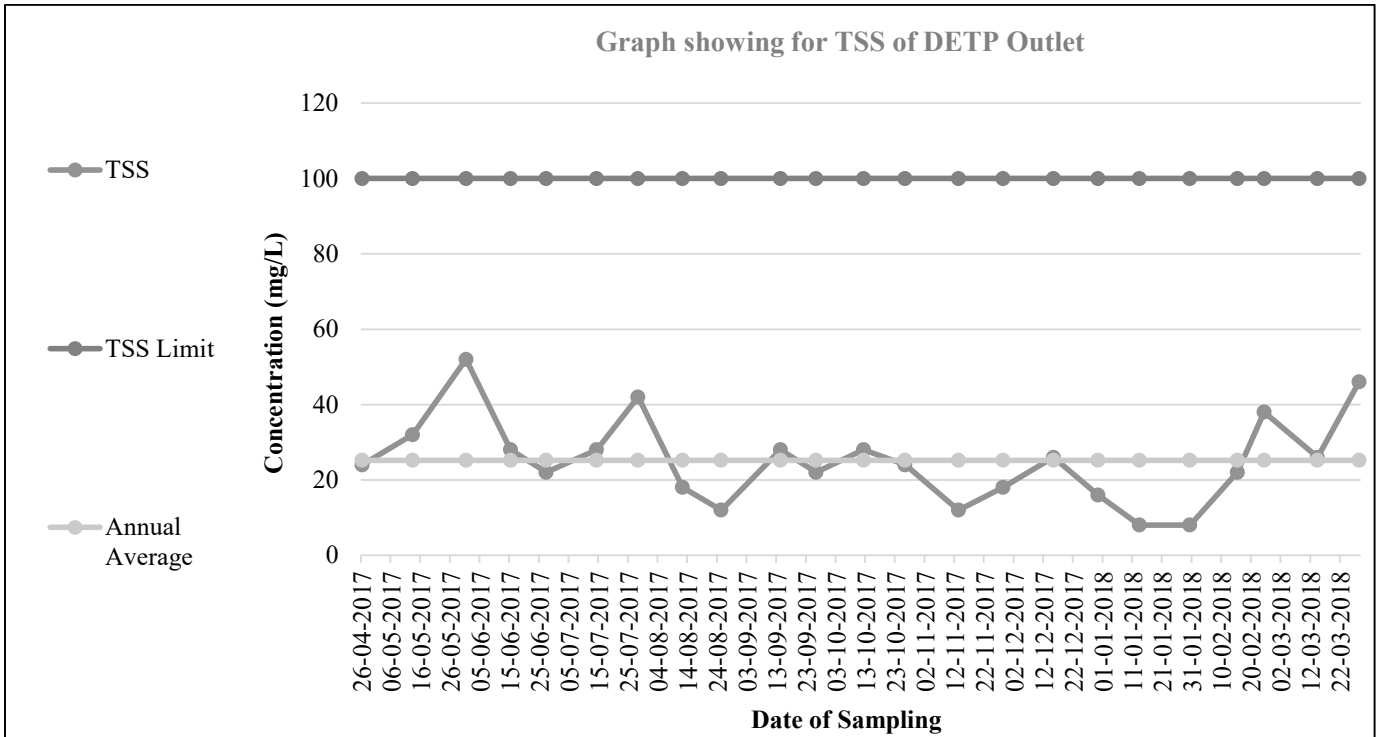
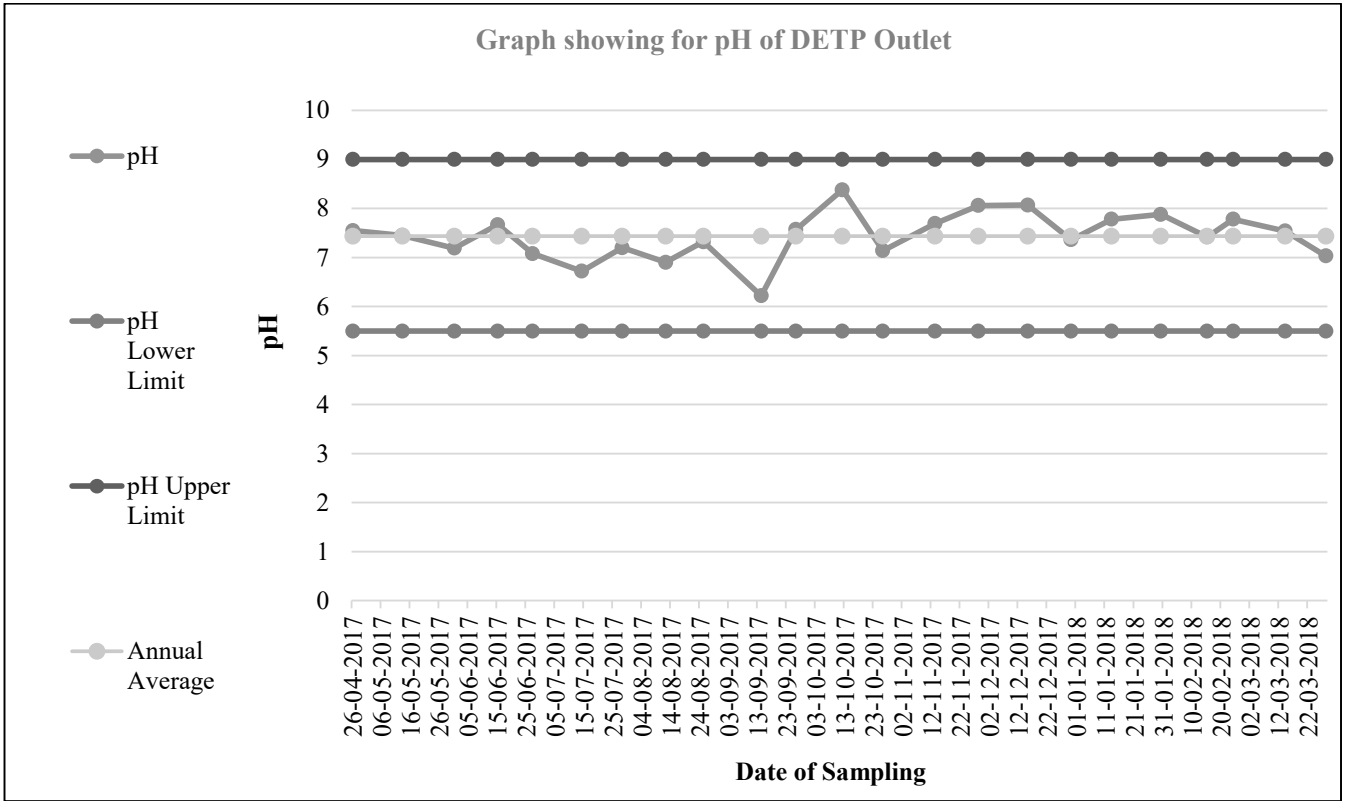
Table: 129
Project: Ananta OCP
Monitoring Station: Mine Sump Water

Date of Sampling	pH
27/04/2017	7.01
14/07/2017	6.2
12/10/2017	4.68
11/01/2018	5.9

Table: 130
Project: Bharatpur OCP
Monitoring Station: DETP Outlet

Date of Sampling	pH	TSS	BOD
26/04/2017	7.6	24	3.8
13/05/2017	7.5	32	4.4
31/05/2017	7.2	52	4.2
15/06/2017	7.7	28	4.8
27/06/2017	7.1	22	3.8
14/07/2017	6.7	28	3.6
28/07/2017	7.2	42	3.8
12/08/2017	6.9	18	3
25/08/2017	7.3	12	4.1
14/09/2017	6.2	28	2.2
26/09/2017	7.6	22	2.2
12/10/2017	8.4	28	3.8
26/10/2017	7.1	24	3.2
13/11/2017	7.7	12	2.4
28/11/2017	8.1	18	3.4
15/12/2017	8.1	26	2.8
30/12/2017	7.4	16	4.2
13/01/2018	7.8	8	3.7
30/01/2018	7.9	8	1.6
15/02/2018	7.4	22	2.5
24/02/2018	7.8	38	2.2
14/03/2018	7.5	26	2.2
28/03/2018	7	46	2.7

All values are in mg/L except pH



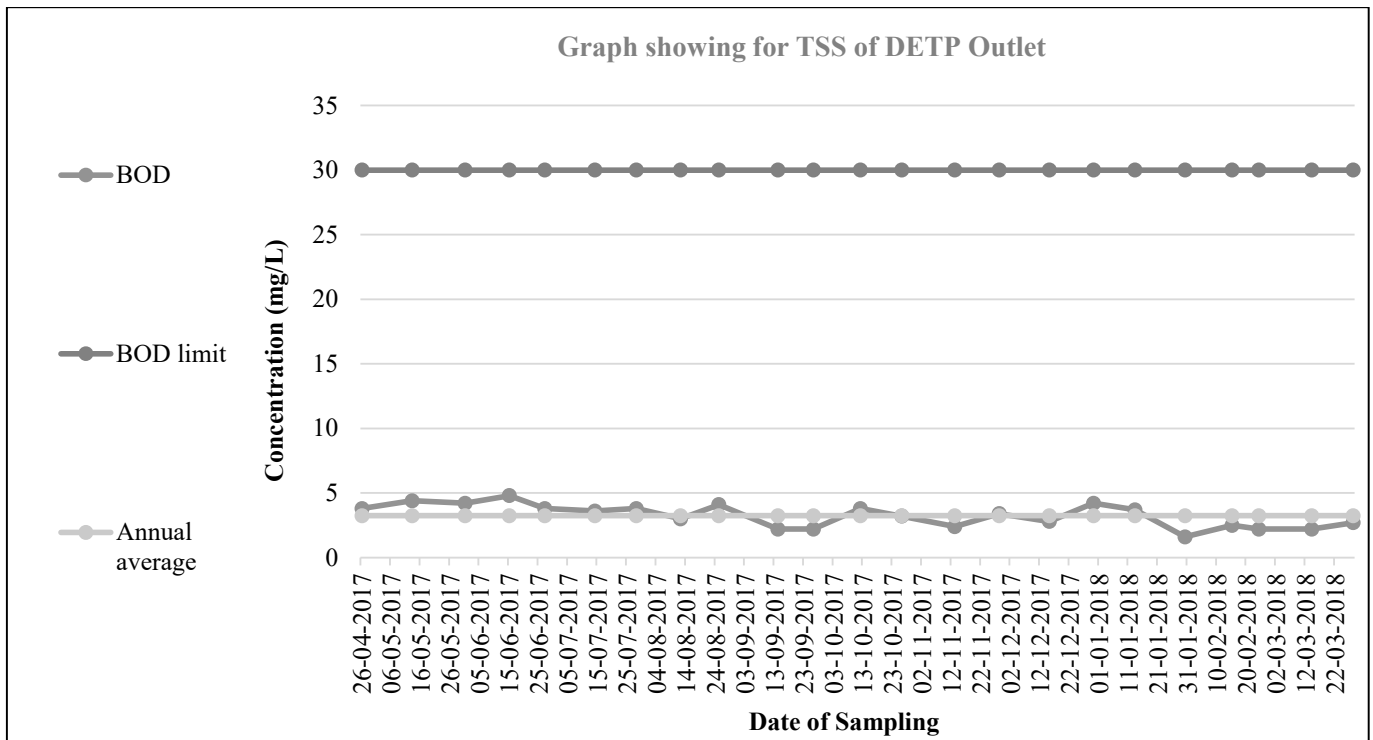


Table: 140
Project: Bharatpur OCP
Monitoring Station: DETP Inlet

Date of Sampling	pH	TSS	BOD
14/09/2017	6.38	36	2.3
14/03/2018	6.95	48	1.8

All values are in mg/L except pH

Table: 141
Project: Bharatpur OCP
Monitoring Station: Oil & Grease Outlet

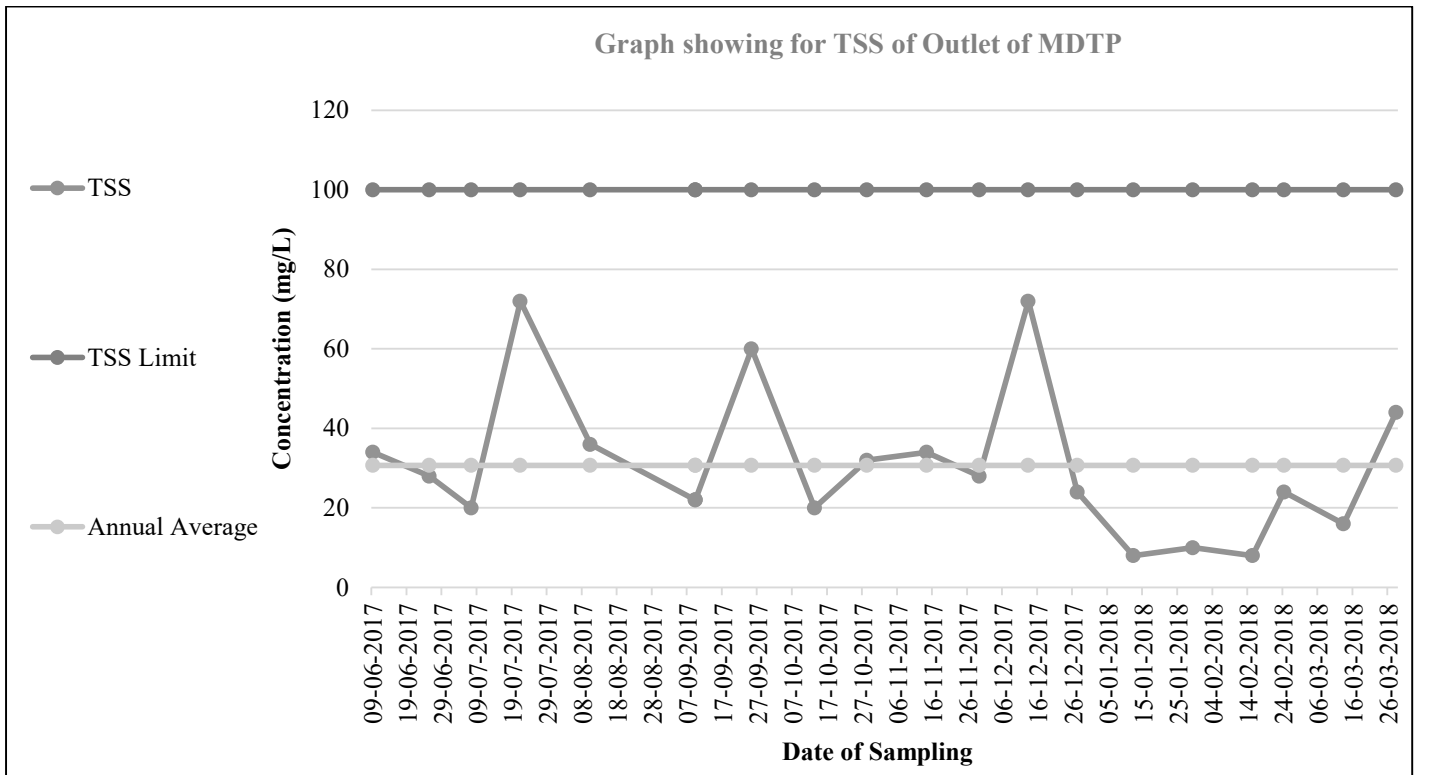
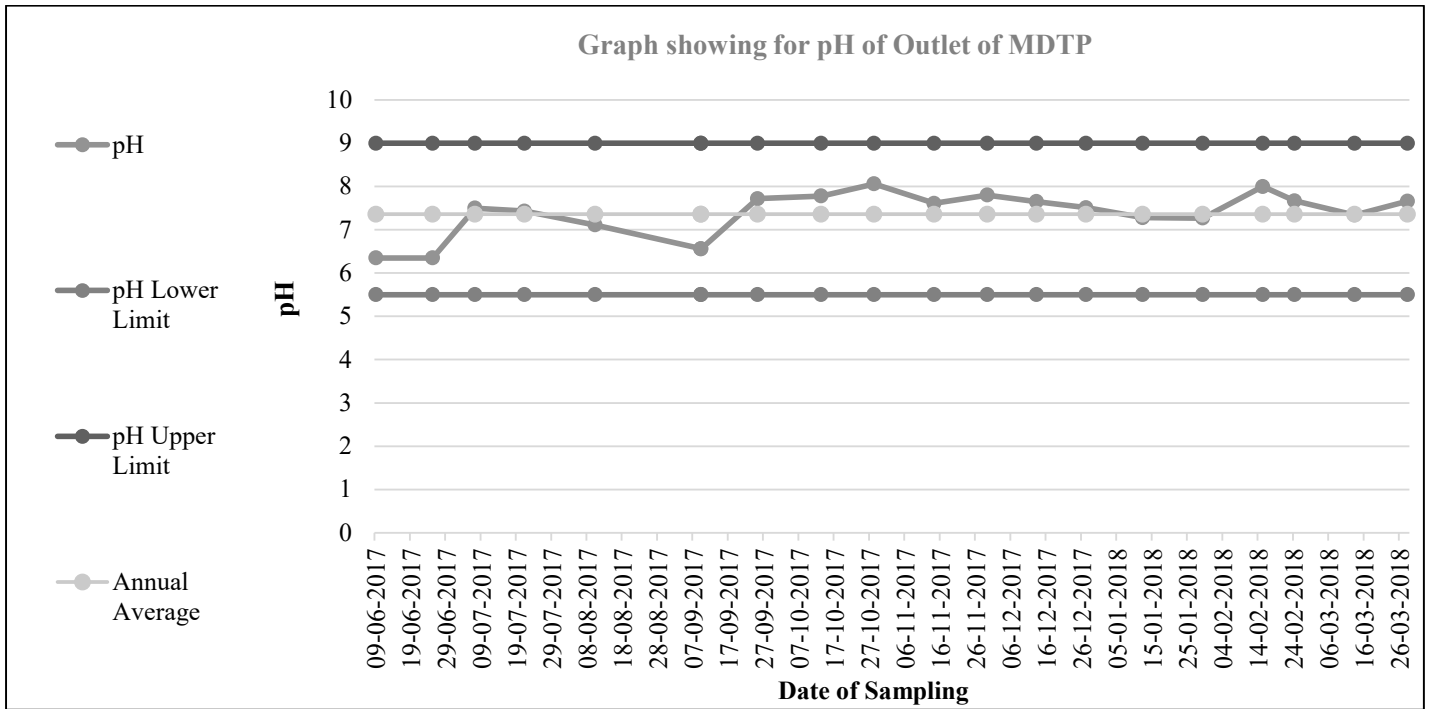
Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.8	<4.0	26	20
14/07/2017	6.5	<4.0	52	40
12/10/2017	7.1	<4.0	88	240
13/01/2018	6.8	<4.0	8	8

All values are in mg/L except pH

Table: 142
Project: Kaniha OCP
Monitoring Station: Outlet of MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	DRY	DRY	DRY	DRY
13/05/2017	DRY	DRY	DRY	DRY
30/05/2017	DRY	DRY	DRY	DRY
09/06/2017	6.35	<4.0	34	28
25/06/2017	6.35	<4.0	28	16
07/07/2017	7.5	<4.0	20	16
21/07/2017	7.43	<4.0	72	64
10/08/2017	7.11	<4.0	36	28
09/09/2017	6.56	<4.0	22	16
09/09/2017	6.56	<4.0	22	16
25/09/2017	7.72	<4.0	60	48
13/10/2017	7.78	<4.0	20	12
28/10/2017	8.06	<4.0	32	28
14/11/2017	7.61	<4.0	34	28
29/11/2017	7.8	<4.0	28	24
13/12/2017	7.65	<4.0	72	64
27/12/2017	7.51	<4.0	24	16
12/01/2018	7.28	<4.0	8	24
29/01/2018	7.27	<4.0	10	16
15/02/2018	8	9.6	8	28
24/02/2018	7.67	3.2	24	20
13/03/2018	7.34	9.4	16	8
28/03/2018	7.66	10	44	36

All values are in mg/L except pH



Graph showing for COD of Outlet of MDTP

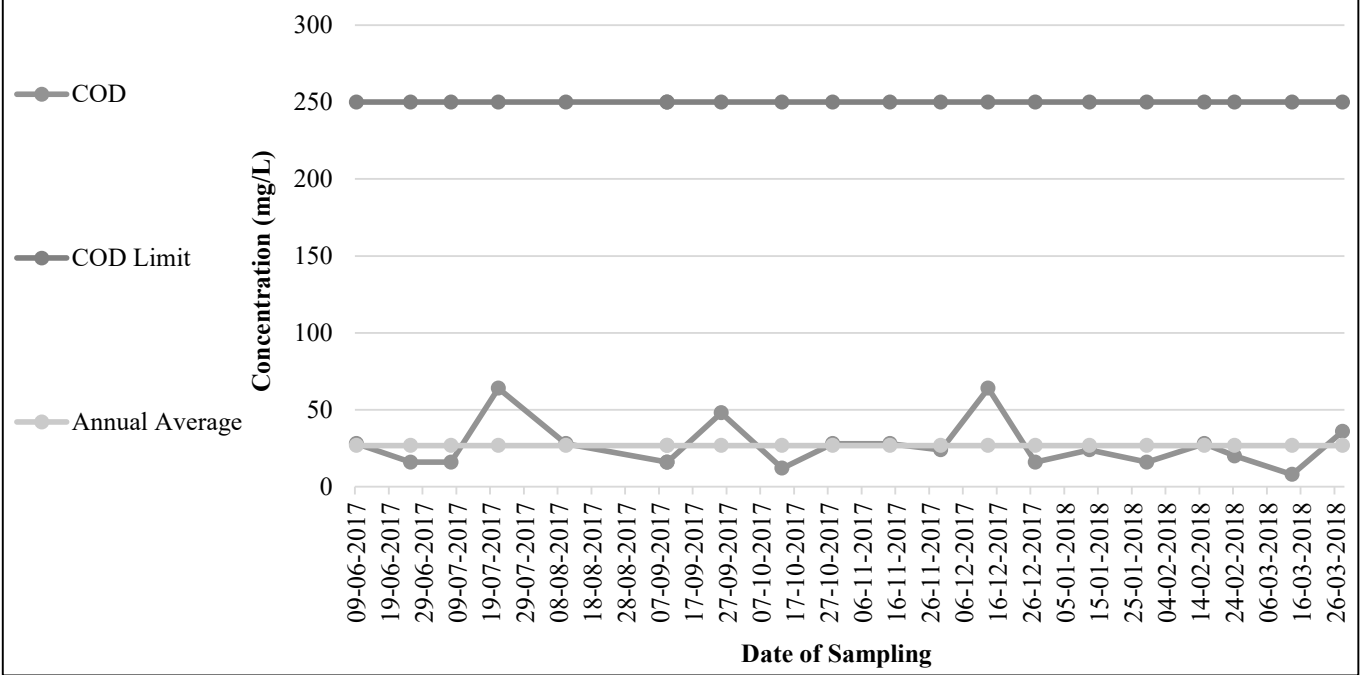
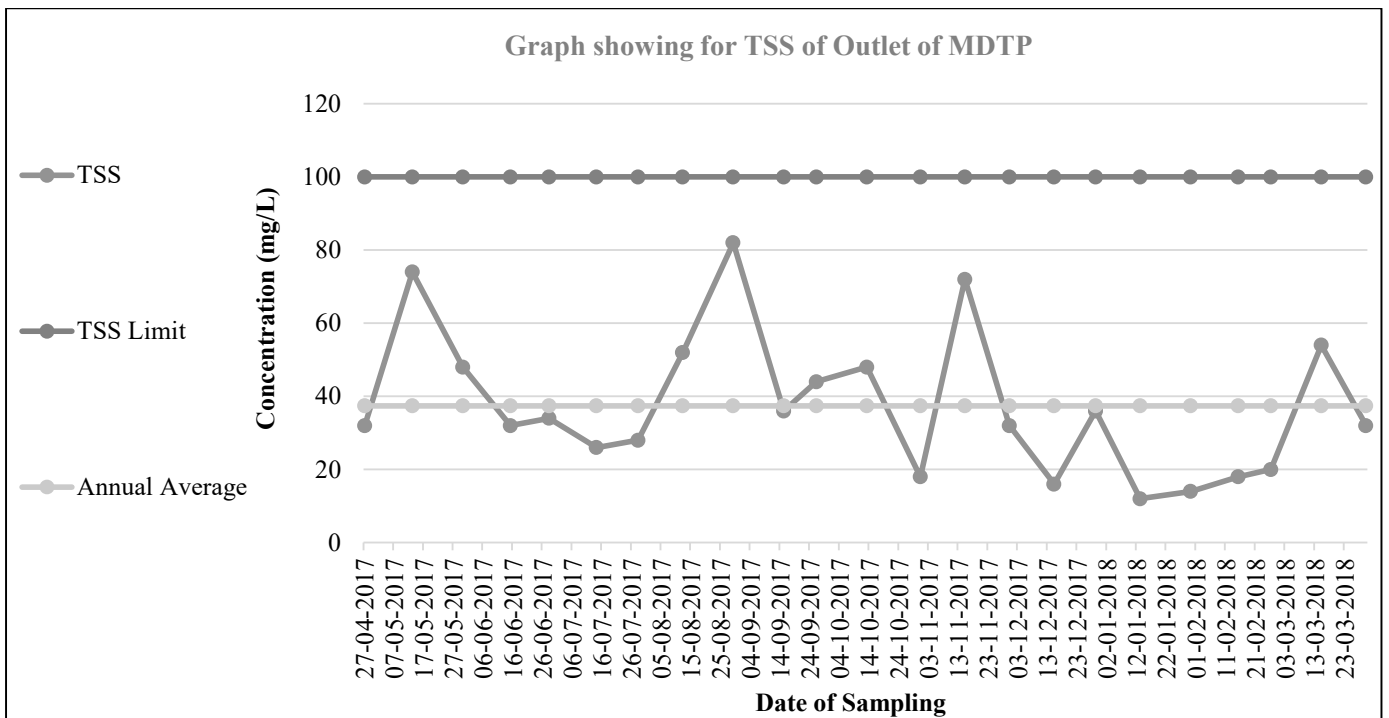
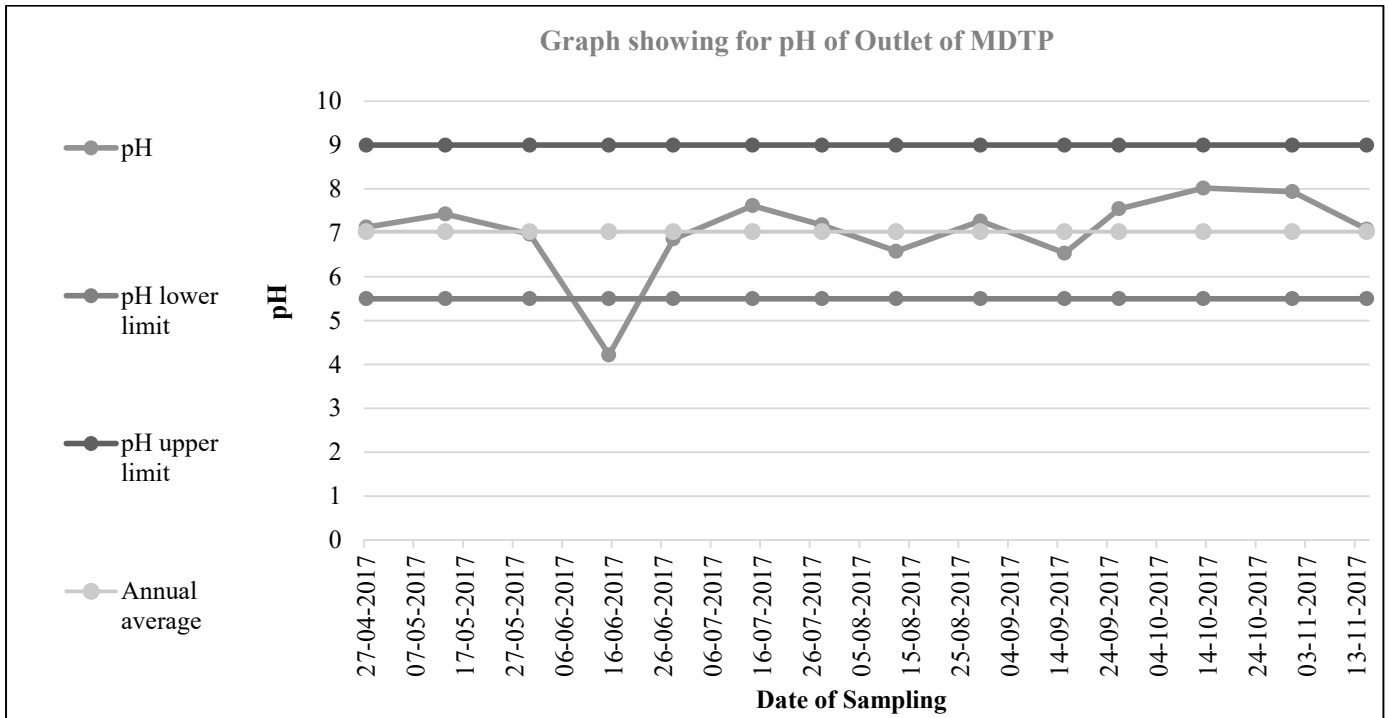


Table: 143
Project: Lingraj OCP
Monitoring Station: Outlet of MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.42	<4.0	32	24
13/05/2017	7.52	<4.0	74	52
30/05/2017	7.34	<4.0	48	36
15/06/2017	7.48	<4.0	32	12
28/06/2017	7.12	<4.0	34	28
14/07/2017	7.65	<4.0	26	8
28/07/2017	7.34	<4.0	28	12
12/08/2017	6.7	<4.0	52	44
29/08/2017	7.5	<4.0	82	76
15/09/2017	6.66	<4.0	36	24
26/09/2017	7.69	<4.0	44	32
13/10/2017	7.92	<4.0	48	36
31/10/2017	7.66	<4.0	18	12
15/11/2017	7.13	<4.0	72	68
30/11/2017	8.12	<4.0	32	28
15/12/2017	8.05	<4.0	16	8
29/12/2017	7.3	<4.0	36	28
13/01/2018	7.18	<4.0	12	28
30/01/2018	7.14	<4.0	14	12
15/02/2018	7.58	<4.0	18	56
26/02/2018	7.73	5.6	20	36
15/03/2018	7.66	3.8	54	8
30/03/2018	7.88	8.8	32	28

All values are in mg/L except pH



Graph showing for COD of Outlet of MDTP

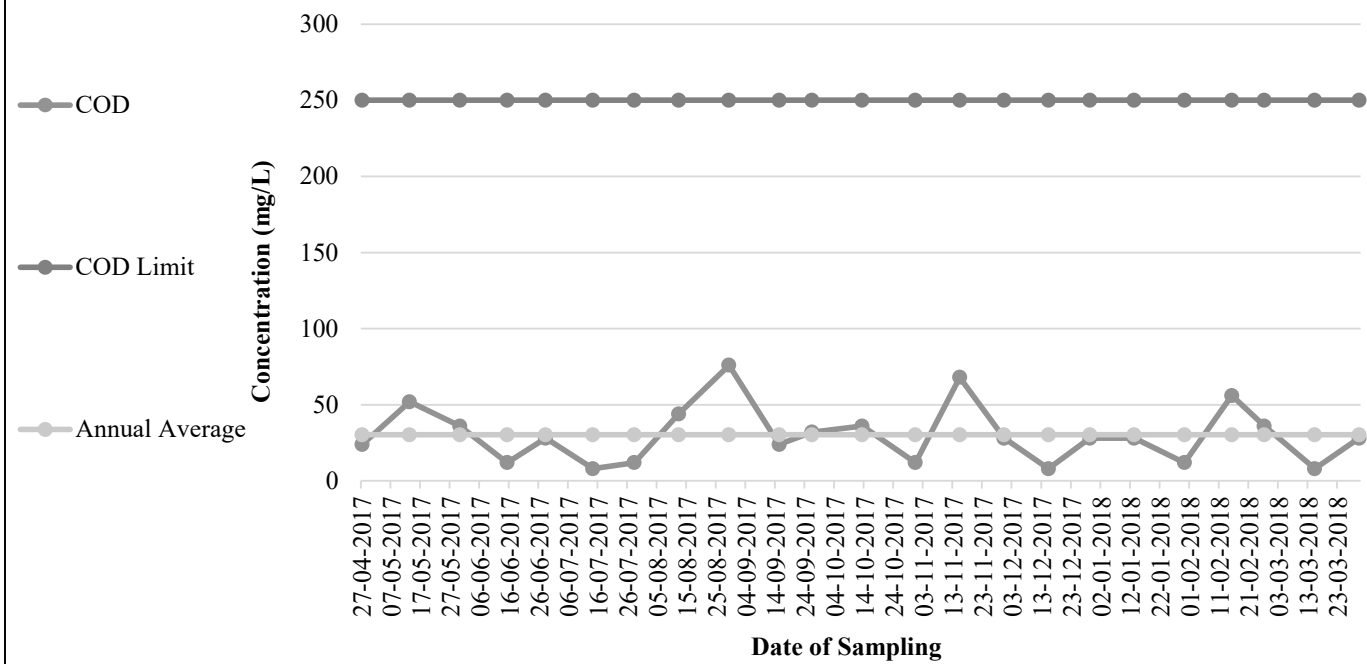
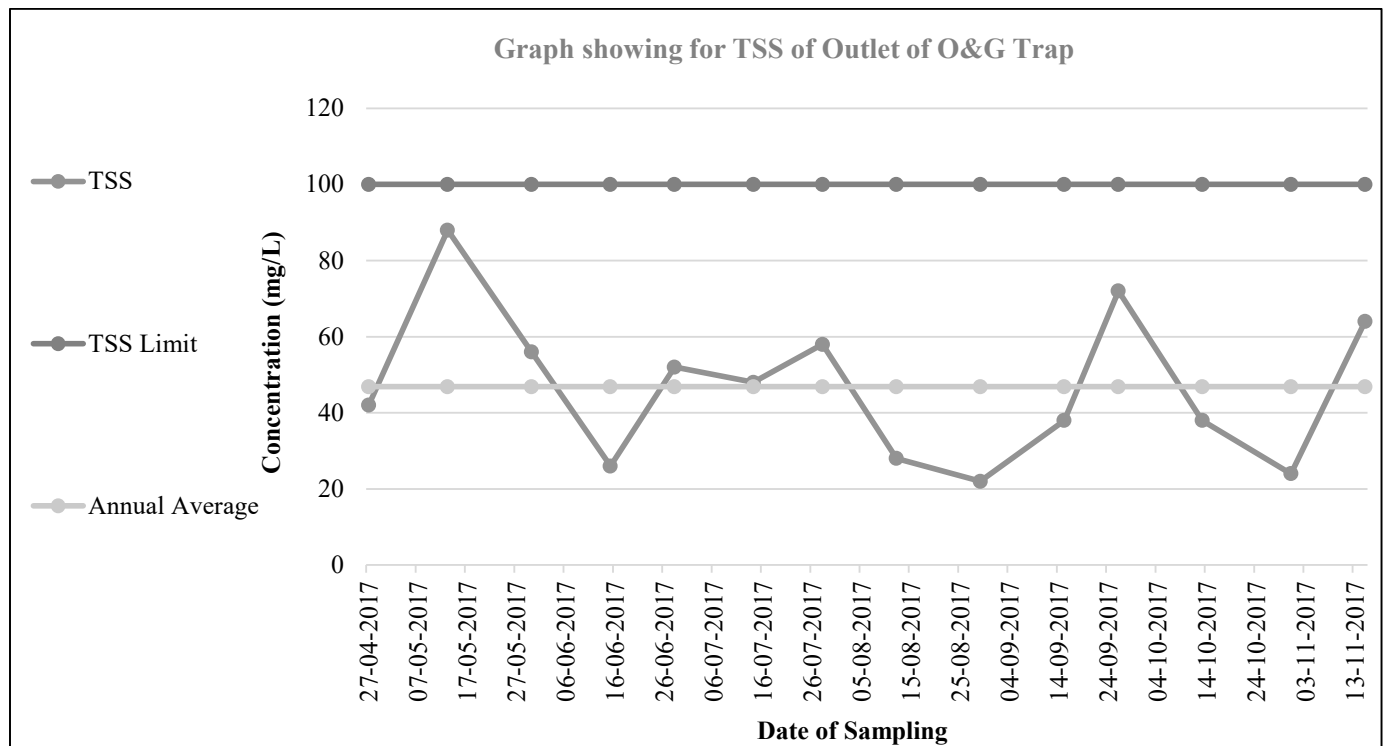
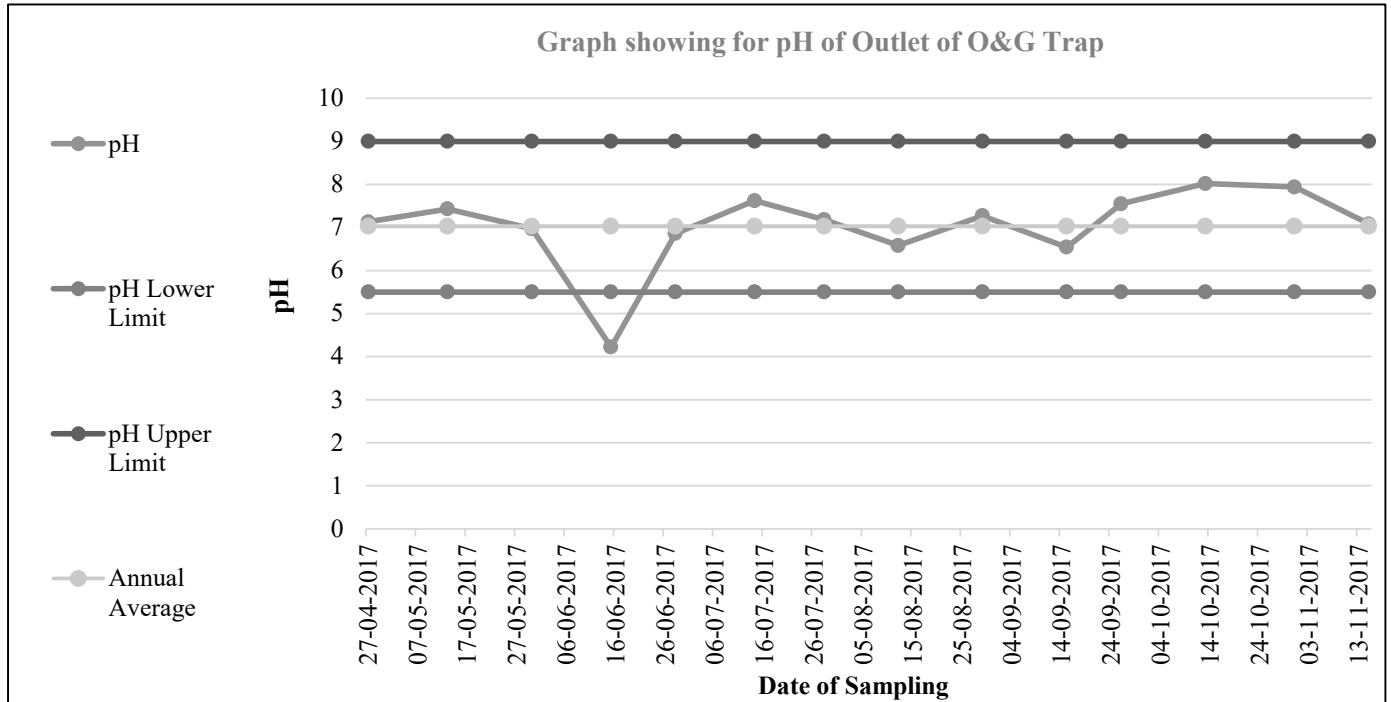


Table: 144
Project: Lingraj OCP
Monitoring Station: Outlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.13	<4.0	42	28
13/05/2017	7.43	<4.0	88	72
30/05/2017	6.97	<4.0	56	44
15/06/2017	4.22	<4.0	26	20
28/06/2017	6.86	<4.0	52	36
14/07/2017	7.62	<4.0	48	32
28/07/2017	7.18	<4.0	58	40
12/08/2017	6.58	<4.0	28	24
29/08/2017	7.27	<4.0	22	16
15/09/2017	6.54	<4.0	38	24
26/09/2017	7.55	<4.0	72	58
13/10/2017	8.02	<4.0	38	32
31/10/2017	7.94	<4.0	24	16
15/11/2017	7.08	<4.0	64	56
30/11/2017	No Discharge	No Discharge	No Discharge	No Discharge
15/12/2017	No Discharge	No Discharge	No Discharge	No Discharge
29/12/2017	No Discharge	No Discharge	No Discharge	No Discharge
13/01/2018	No Discharge	No Discharge	No Discharge	No Discharge
30/01/2018	No Discharge	No Discharge	No Discharge	No Discharge
15/02/2018	No Discharge	No Discharge	No Discharge	No Discharge
26/02/2018	No Discharge	No Discharge	No Discharge	No Discharge
15/03/2018	No Discharge	No Discharge	No Discharge	No Discharge

All values are in mg/L except pH



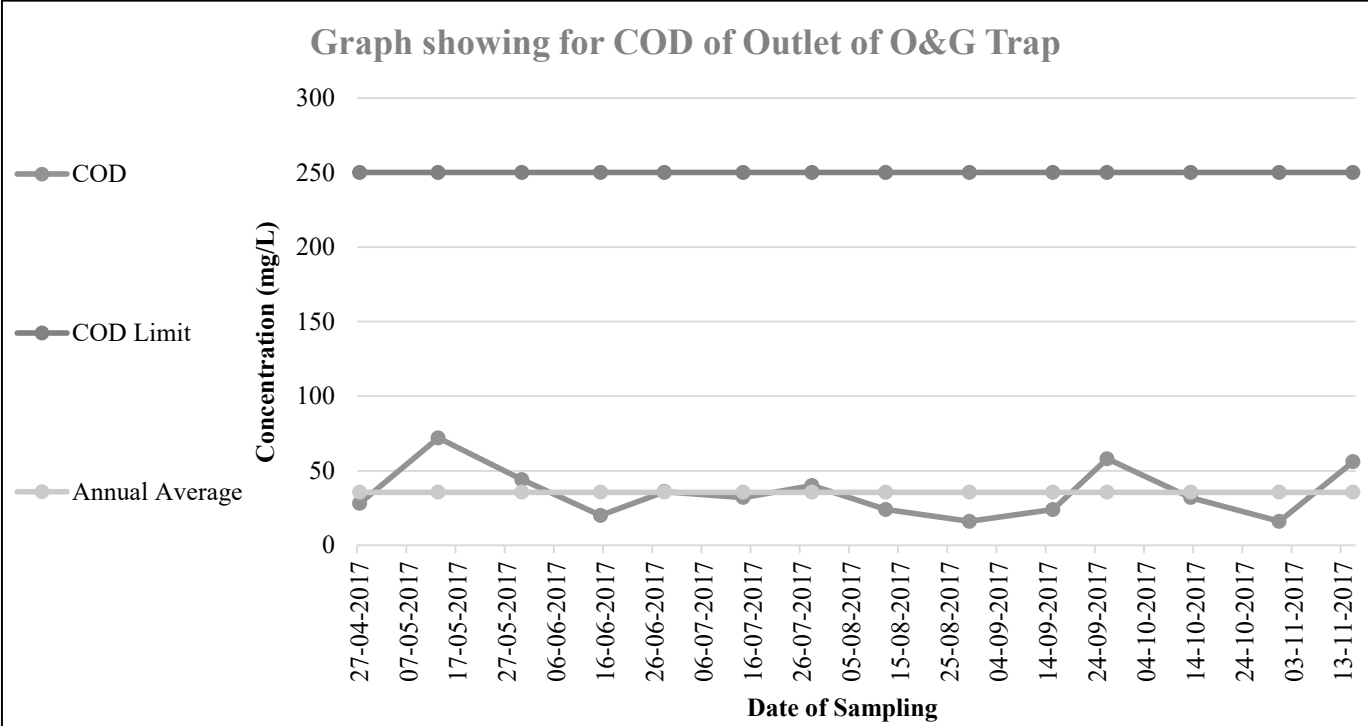


Table: 145
Project: Lingraj OCP
Monitoring Station: Mine Sump Water

Sampling Station	Date of Sampling	pH
Mine sump water	27/04/2017	Pump Breakdown
Mine sump water	13/05/2017	7.78
Mine sump water	15/06/2017	7.26
Mine sump water	14/07/2017	7.41
Mine sump water	12/08/2017	6.59
Mine Sump water	15/09/2017	6.6
Mine Sump water	13/10/2017	8.2
Mine Sump water	15/11/2017	8.04
Mine Sump water	15/12/2017	7.76
Mine Sump water	13/01/2018	7.68
Mine Sump Water	15/02/2018	8.15
Mine sump water	15/03/2018	7.8

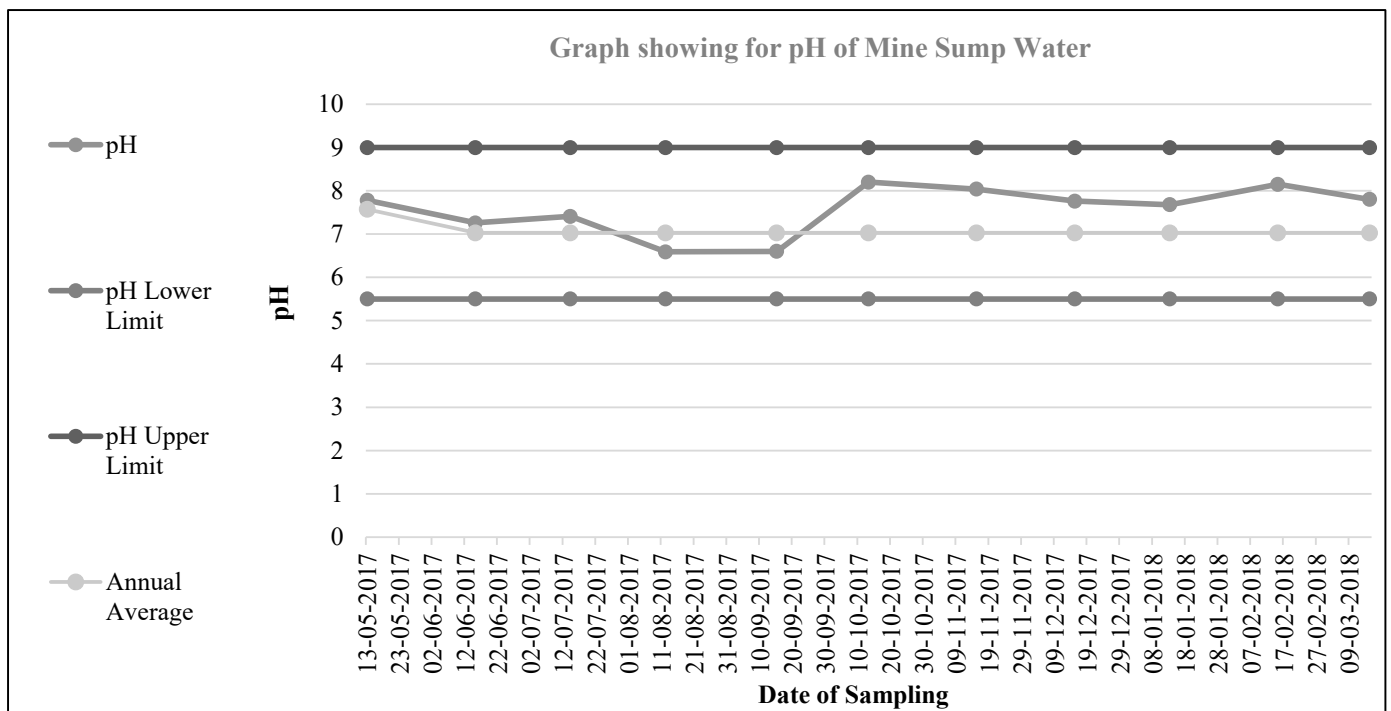
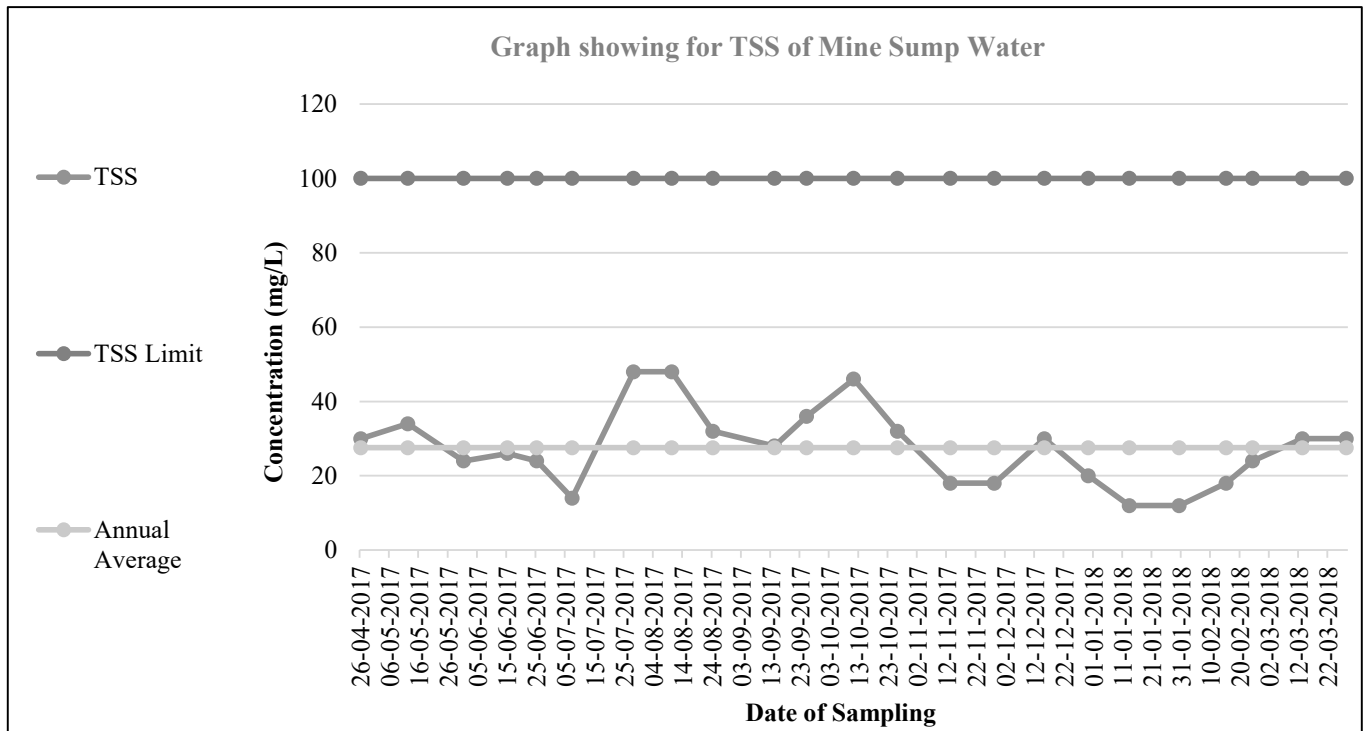
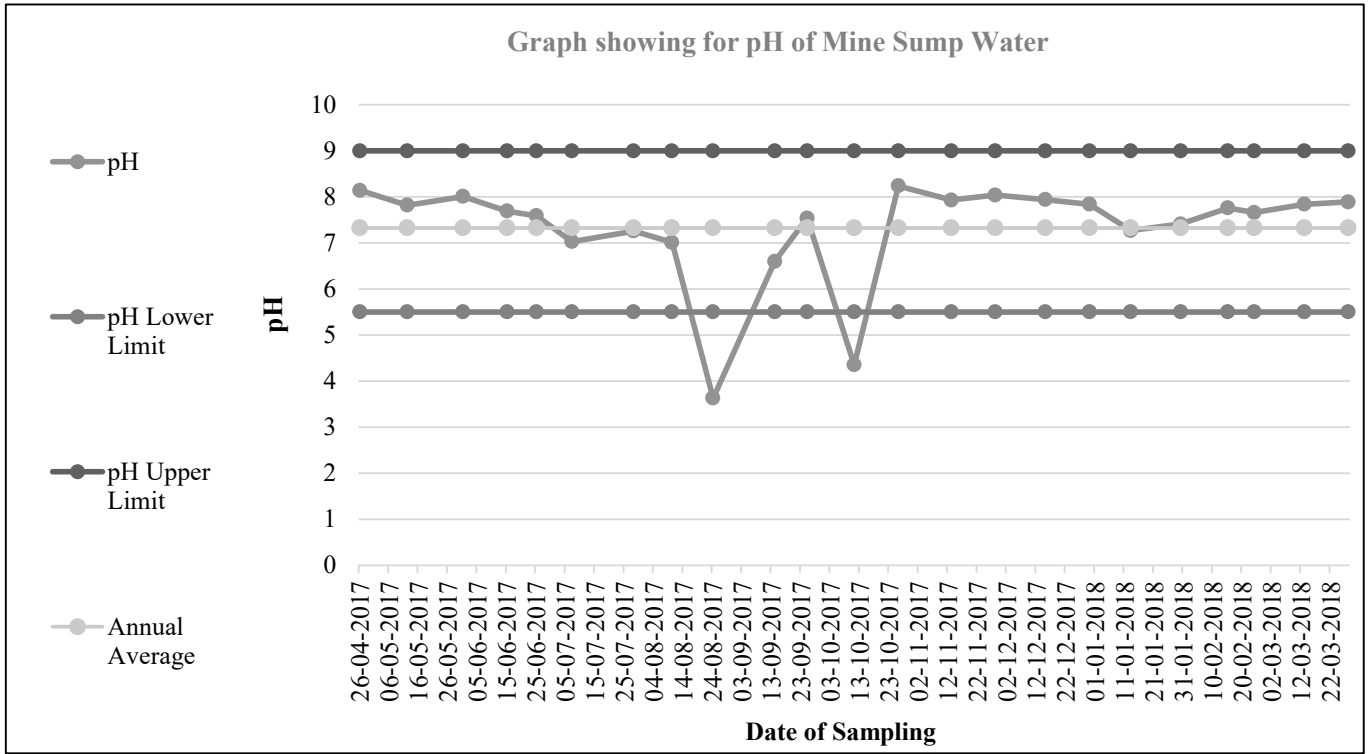


Table: 146
Project: Balram OCP
Monitoring Station: Mine Sump Water

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	8.14	<4.0	30	20
12/05/2017	7.82	<4.0	34	20
31/05/2017	8.01	<4.0	24	12
15/06/2017	7.69	<4.0	26	8
25/06/2017	7.59	<4.0	24	16
07/07/2017	7.03	<4.0	14	8
28/07/2017	7.26	<4.0	48	36
10/08/2017	7.01	<4.0	48	40
24/08/2017	3.63	<4.0	32	24
14/09/2017	6.6	<4.0	28	16
25/09/2017	7.54	<4.0	36	24
11/10/2017	4.35	<4.0	46	32
26/10/2017	8.24	<4.0	32	20
13/11/2017	7.93	<4.0	18	12
28/11/2017	8.04	<4.0	18	12
15/12/2017	7.94	<4.0	30	24
30/12/2017	7.84	<4.0	20	16
13/01/2018	7.27	6	12	40
30/01/2018	7.41	9.8	12	28
15/02/2018	7.76	4.2	18	24
24/02/2018	7.66	4.6	24	16
13/03/2018	7.84	7	30	8
28/03/2018	7.89	12.4	30	40

All values are in mg/L except pH



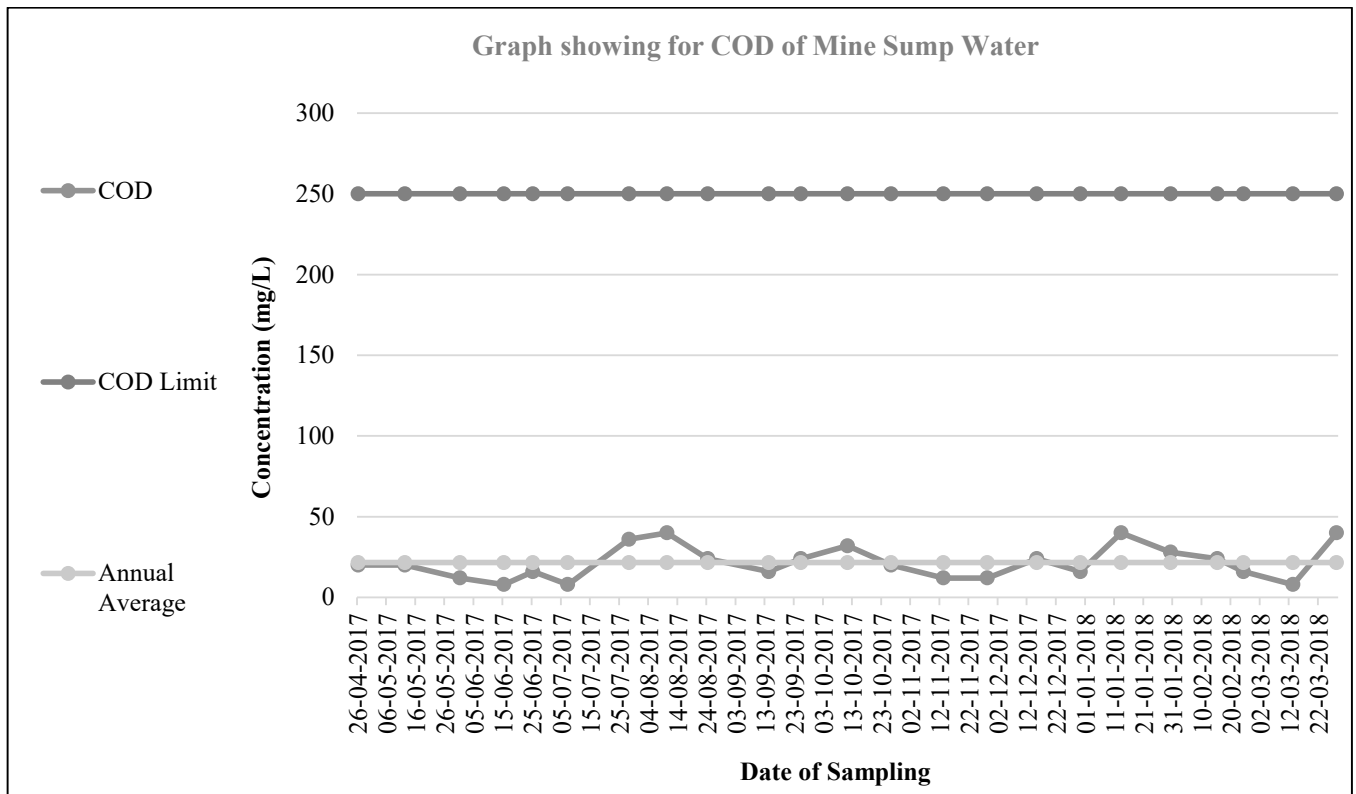


Table: 147
Project: Balram OCP
Monitoring Station: DETP Outlet

Date of Sampling	pH	TSS	BOD
11/10/2017	8.25	24	3.4
13/01/2018	7.12	8	3.2
07/07/2017	6.52	36	4.2
26/04/2017	7.78	22	2.8

All values are in mg/L except pH

Table: 148
Project: Balram OCP
Monitoring Station: Inlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.53	<4.0	52	44
07/07/2017	7.15	<4.0	92	84
11/10/2017	ETP work in progress	ETP work in progress	ETP work in progress	ETP work in progress
26/10/2017	ETP work in progress	ETP work in progress	ETP work in progress	ETP work in progress
13/03/2018	Maintenance	Maintenance	Maintenance	Maintenance

All values are in mg/L except pH

Table: 149
Project: Balram OCP
Monitoring Station: Outlet of O & G Trap

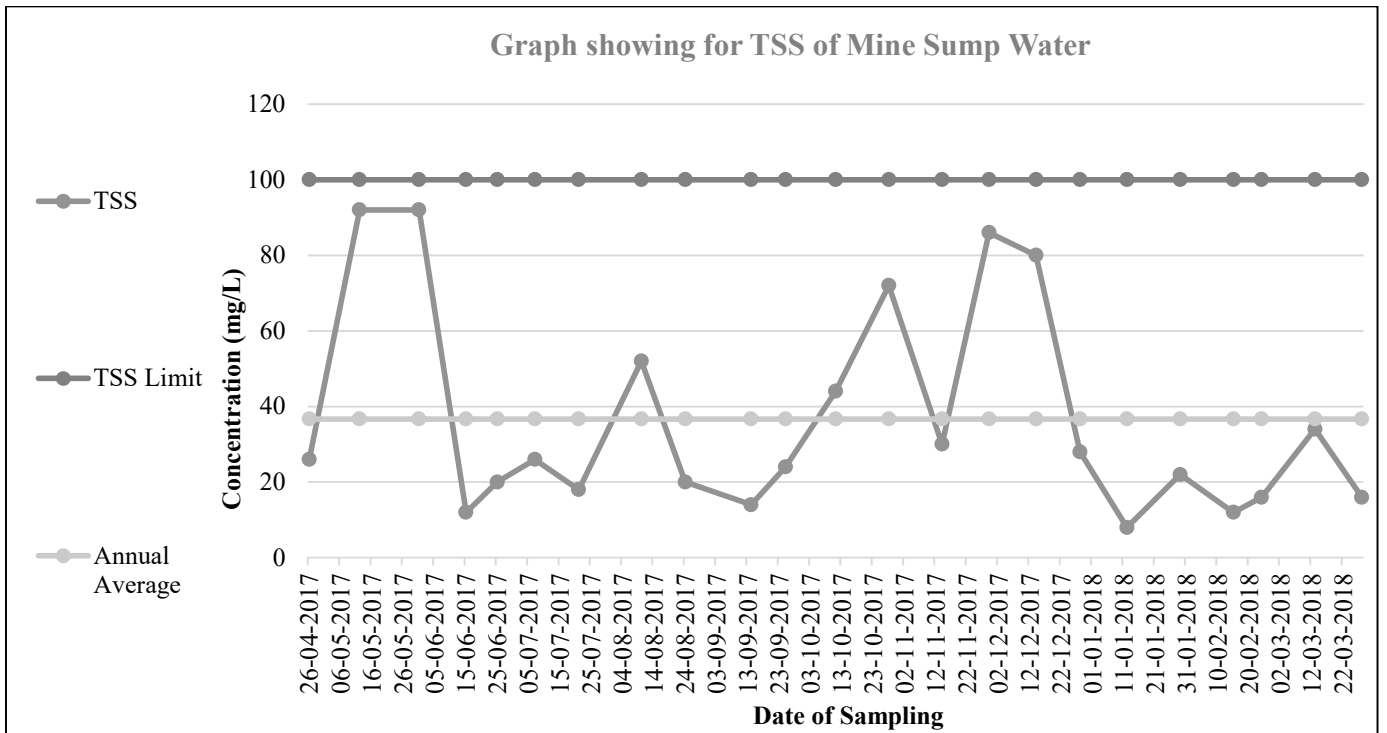
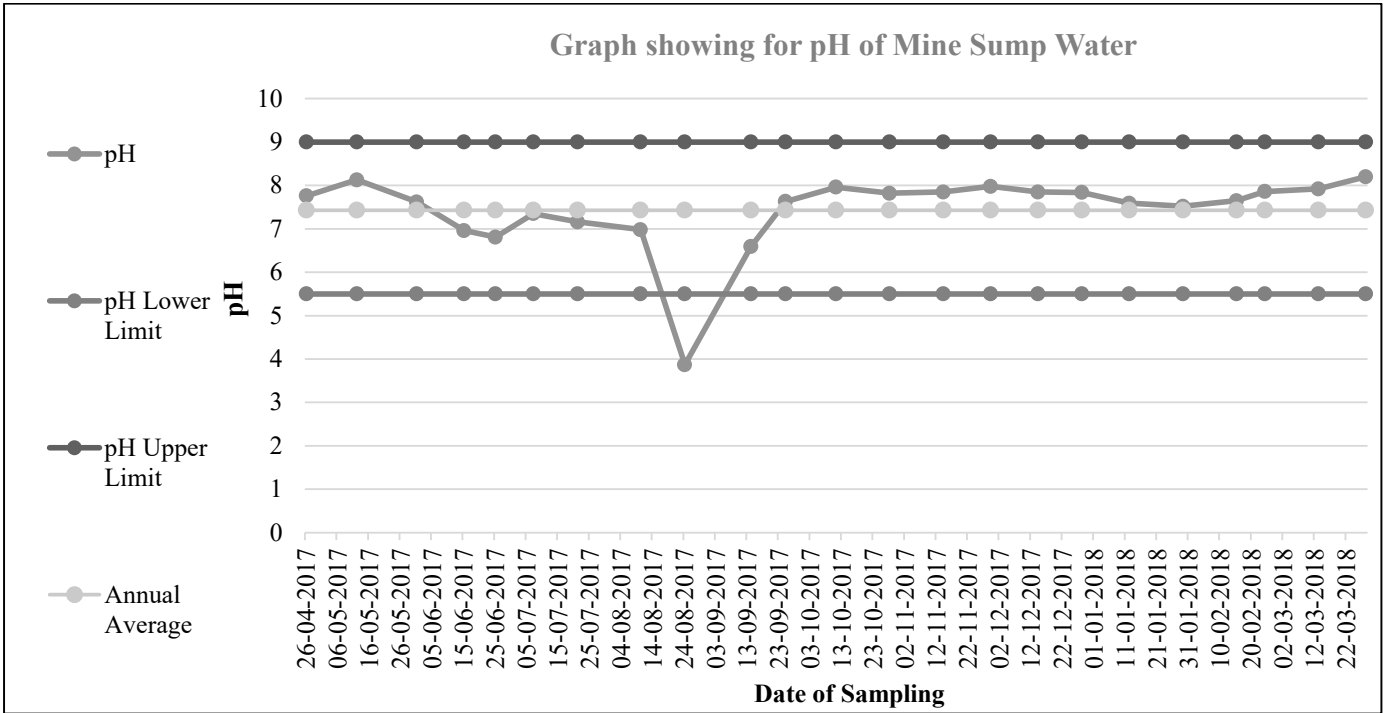
Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.54	<4.0	88	80
07/07/2017	6.94	<4.0	84	76
13/01/2018	Maintenance	Maintenance	Maintenance	Maintenance
13/03/2018	Maintenance	Maintenance	Maintenance	Maintenance
11/10/2017	ETP work in progress	ETP work in progress	ETP work in progress	ETP work in progress
26/10/2017	ETP work in progress	ETP work in progress	ETP work in progress	ETP work in progress
10/08/2017	DRY	DRY	DRY	DRY

All values are in mg/L except pH

Table: 150
Project: Hingula OCP
Monitoring Station: Mine Sump Water

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.8	<4.0	26	20
12/05/2017	8.1	<4.0	92	108
31/05/2017	7.6	<4.0	92	168
10/08/2017	7	<4.0	52	44
24/08/2017	3.9	<4.0	20	16
14/09/2017	6.6	<4.0	14	8
25/09/2017	7.6	<4.0	24	12
11/10/2017	8	<4.0	44	36
28/10/2017	7.8	<4.0	72	64
14/11/2017	7.9	<4.0	30	24
29/11/2017	8	<4.0	86	88
14/12/2017	7.9	<4.0	80	76
28/12/2017	7.8	<4.0	28	20
12/01/2018	7.6	9.8	8	28
29/01/2018	7.5	11.4	22	64
15/02/2018	7.7	<4.0	12	32
24/02/2018	7.9	4.2	16	24
25/06/2017	6.8	<4.0	20	8
07/07/2017	7.4	<4.0	26	12
21/07/2017	7.2	<4.0	18	8
28/03/2018	8.2	8	16	28
15/06/2017	7	<4.0	12	24
13/03/2018	7.9	9.6	34	24

All values are in mg/L except pH



Graph showing for COD of Mine Sump Water

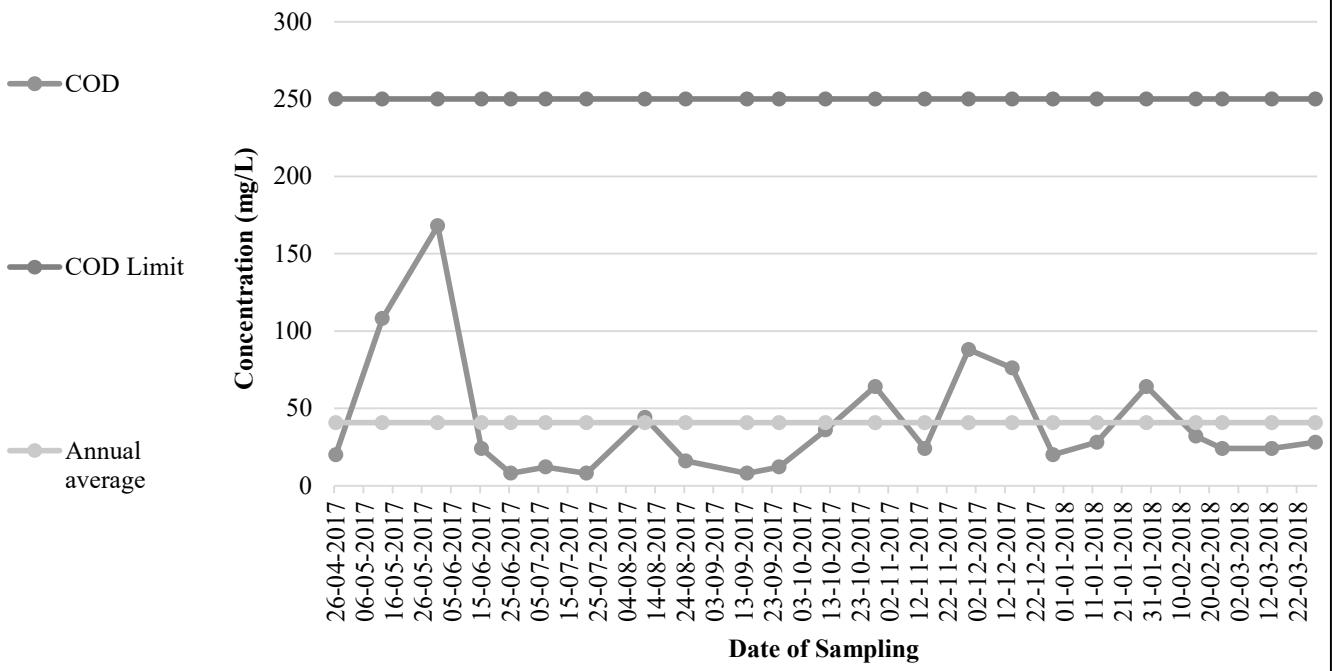
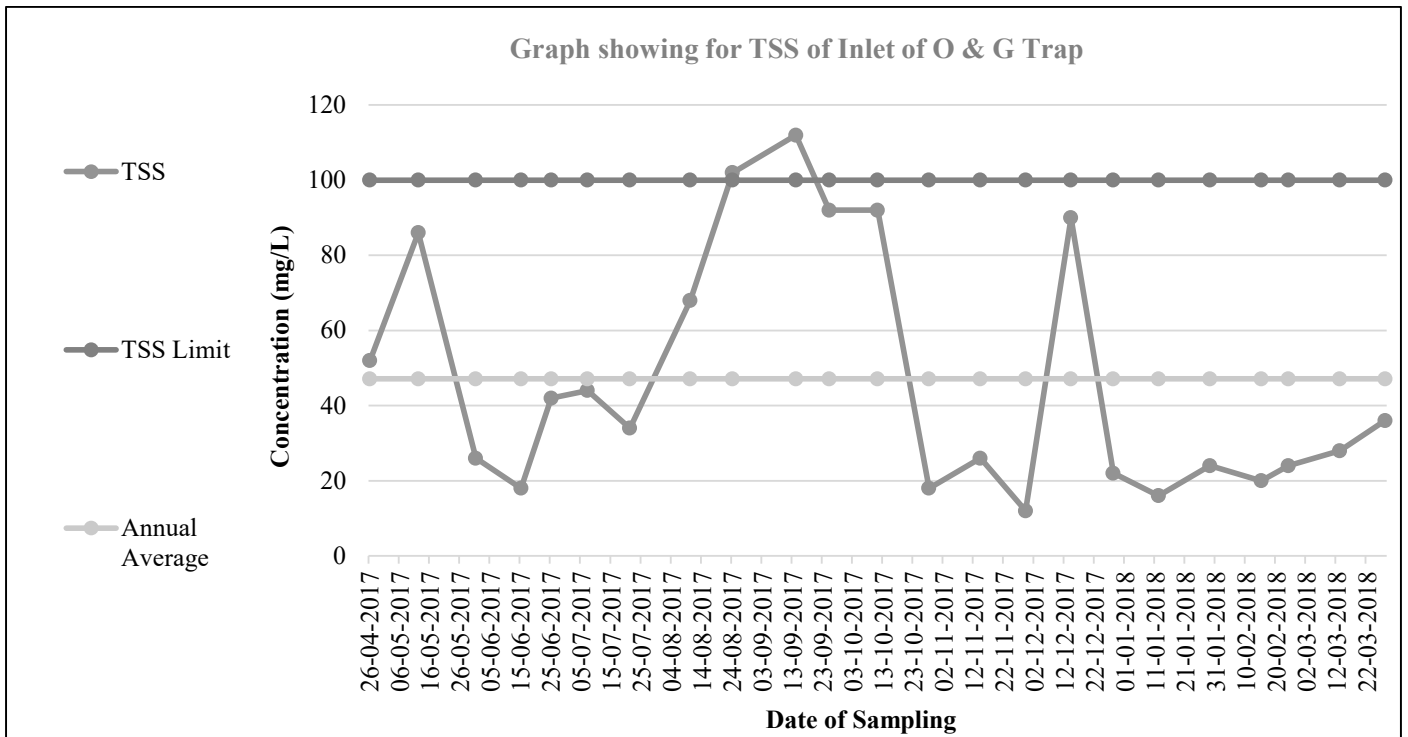
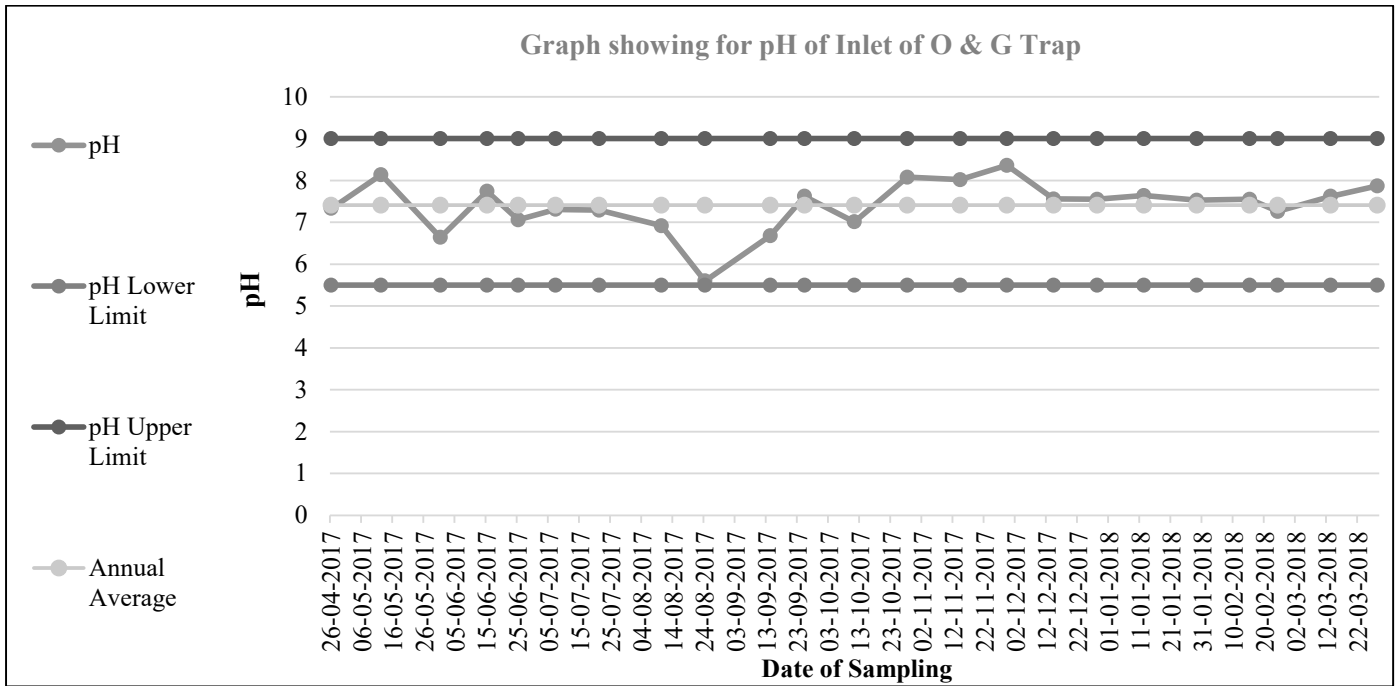


Table:151
Project: Hingula OCP
Monitoring Station: Inlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.3	<4.0	52	40
12/05/2017	8.1	<4.0	86	92
31/05/2017	6.6	<4.0	26	12
15/06/2017	7.7	<4.0	18	12
25/06/2017	7.1	<4.0	42	24
07/07/2017	7.3	<4.0	44	32
21/07/2017	7.3	<4.0	34	28
10/08/2017	6.9	<4.0	68	56
24/08/2017	5.6	<4.0	102	400
14/09/2017	6.7	<4.0	112	320
25/09/2017	7.6	<4.0	92	320
11/10/2017	7	<4.0	92	240
28/10/2017	8.1	<4.0	18	12
14/11/2017	8	<4.0	26	20
29/11/2017	8.4	<4.0	12	8
14/12/2017	7.6	<4.0	90	88
28/12/2017	7.6	<4.0	22	16
12/01/2018	7.6	10.2	16	36
29/01/2018	7.5	22.4	24	380
15/02/2018	7.6	8	20	48
24/02/2018	7.3	8.4	24	40
13/03/2018	7.6	6	28	44
28/03/2018	7.9	8.8	36	444

All values are in mg/L except pH



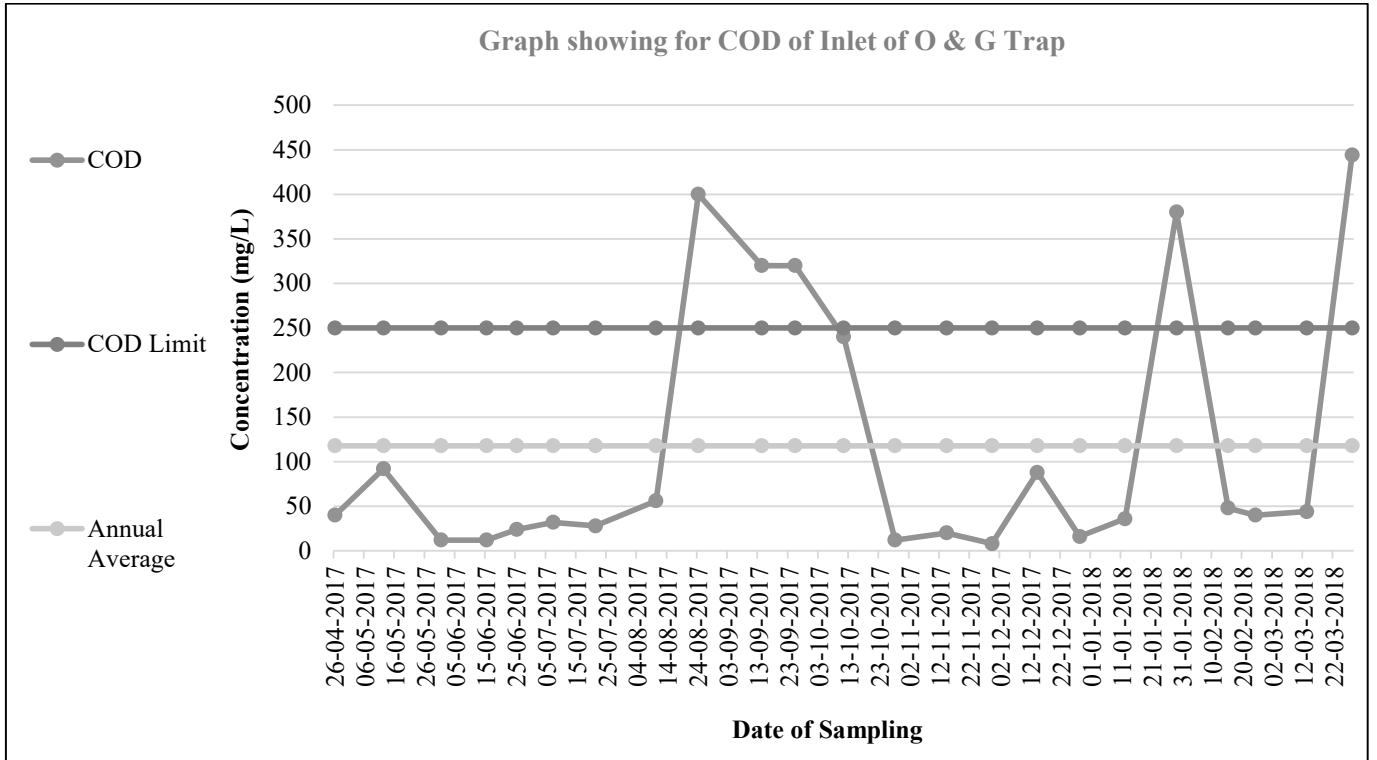
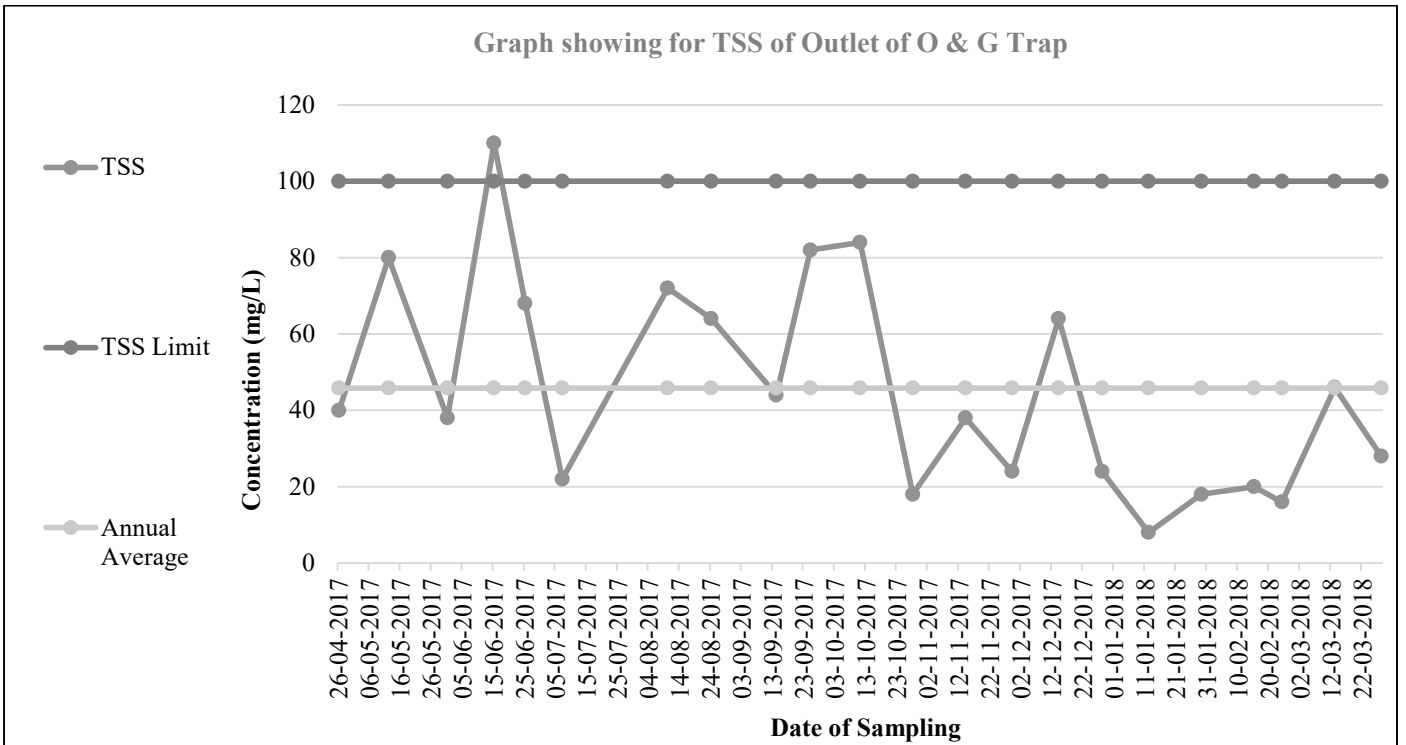
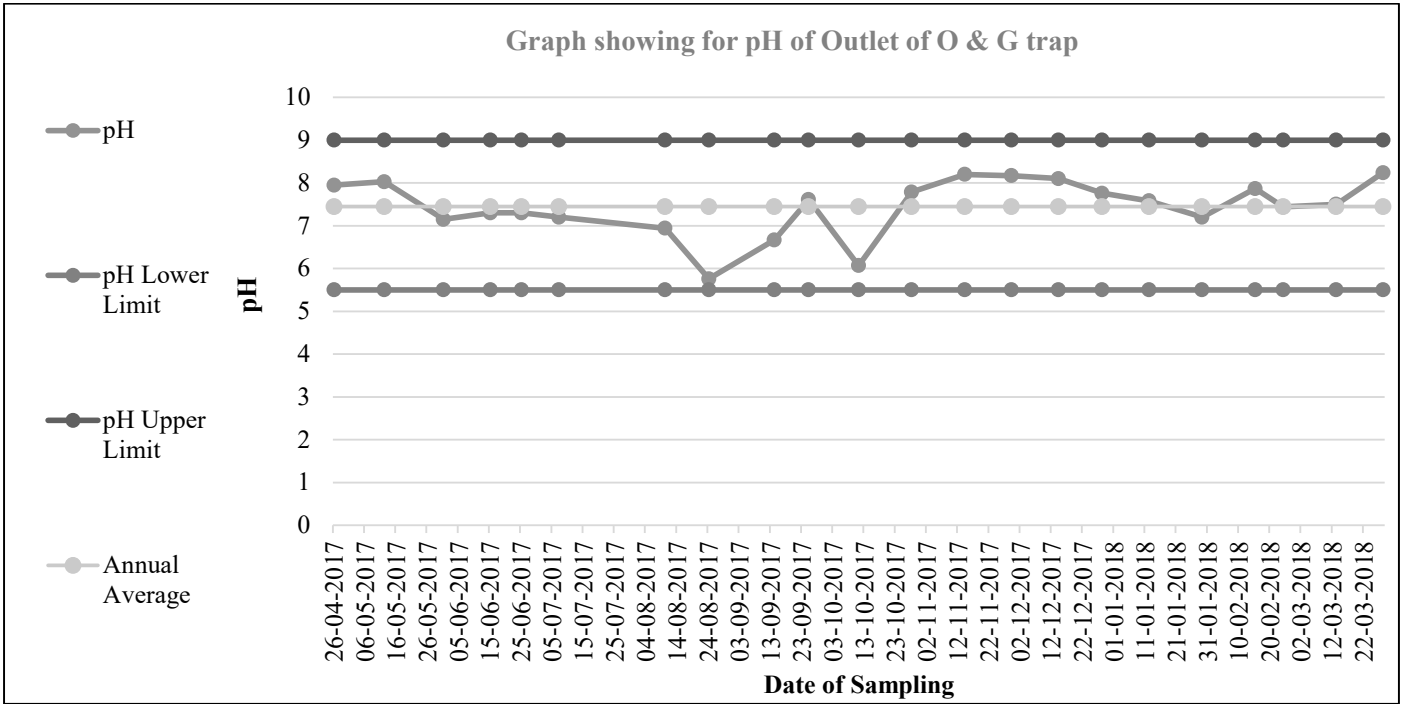


Table: 152
Project: Hingula OCP
Monitoring Station: Outlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
26/04/2017	7.95	<4.0	40	16
12/05/2017	8.03	<4.0	80	68
31/05/2017	7.15	<4.0	38	24
15/06/2017	7.3	<4.0	110	280
25/06/2017	7.3	<4.0	68	52
07/07/2017	7.2	<4.0	22	8
21/07/2017	Maintenance	Maintenance	Maintenance	Maintenance
10/08/2017	6.94	<4.0	72	112
24/08/2017	5.76	<4.0	64	60
14/09/2017	6.67	<4.0	44	32
25/09/2017	7.61	<4.0	82	160
11/10/2017	6.07	<4.0	84	200
28/10/2017	7.79	<4.0	18	12
14/11/2017	8.2	<4.0	38	32
29/11/2017	8.17	<4.0	24	20
14/12/2017	8.1	<4.0	64	56
28/12/2017	7.76	<4.0	24	12
12/01/2018	7.58	9.6	8	24
29/01/2018	7.2	16.6	18	16
15/02/2018	7.87	<4.0	20	36
24/02/2018	7.44	7.4	16	36
13/03/2018	7.5	5.4	46	16
28/03/2018	8.24	5.2	28	28

All values are in mg/L except pH



Graph showing for COD of Outlet of O & G Trap

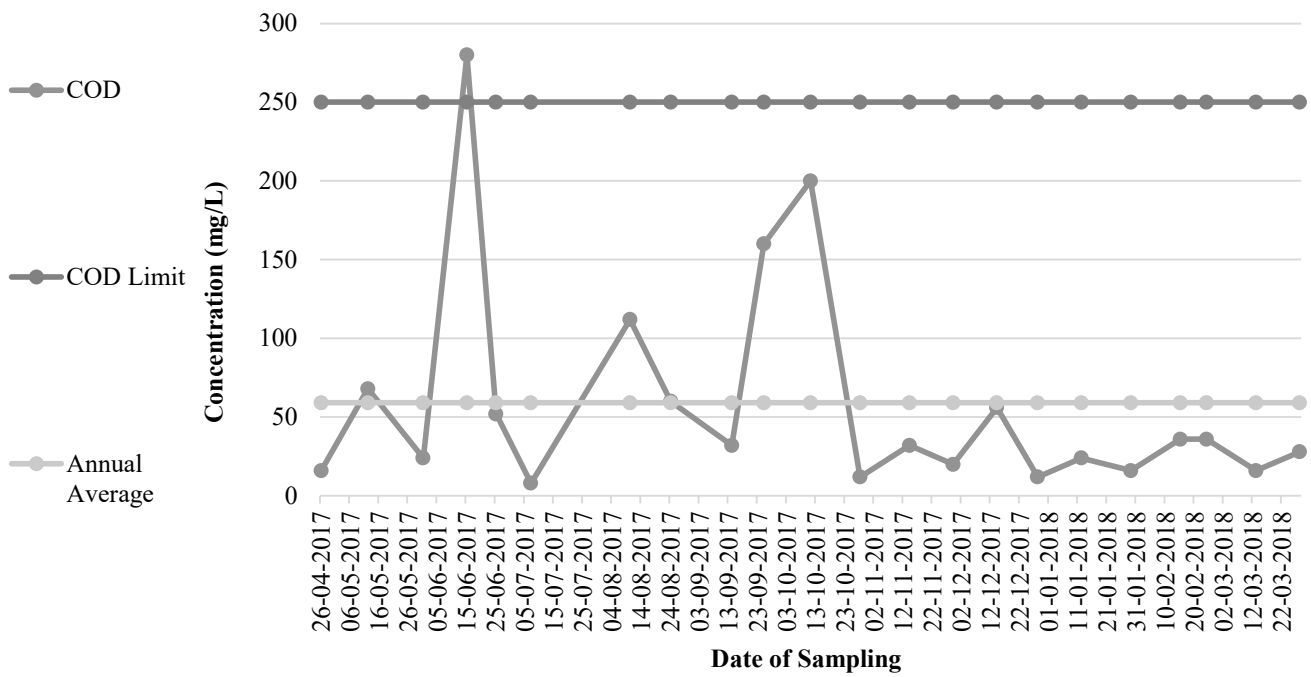
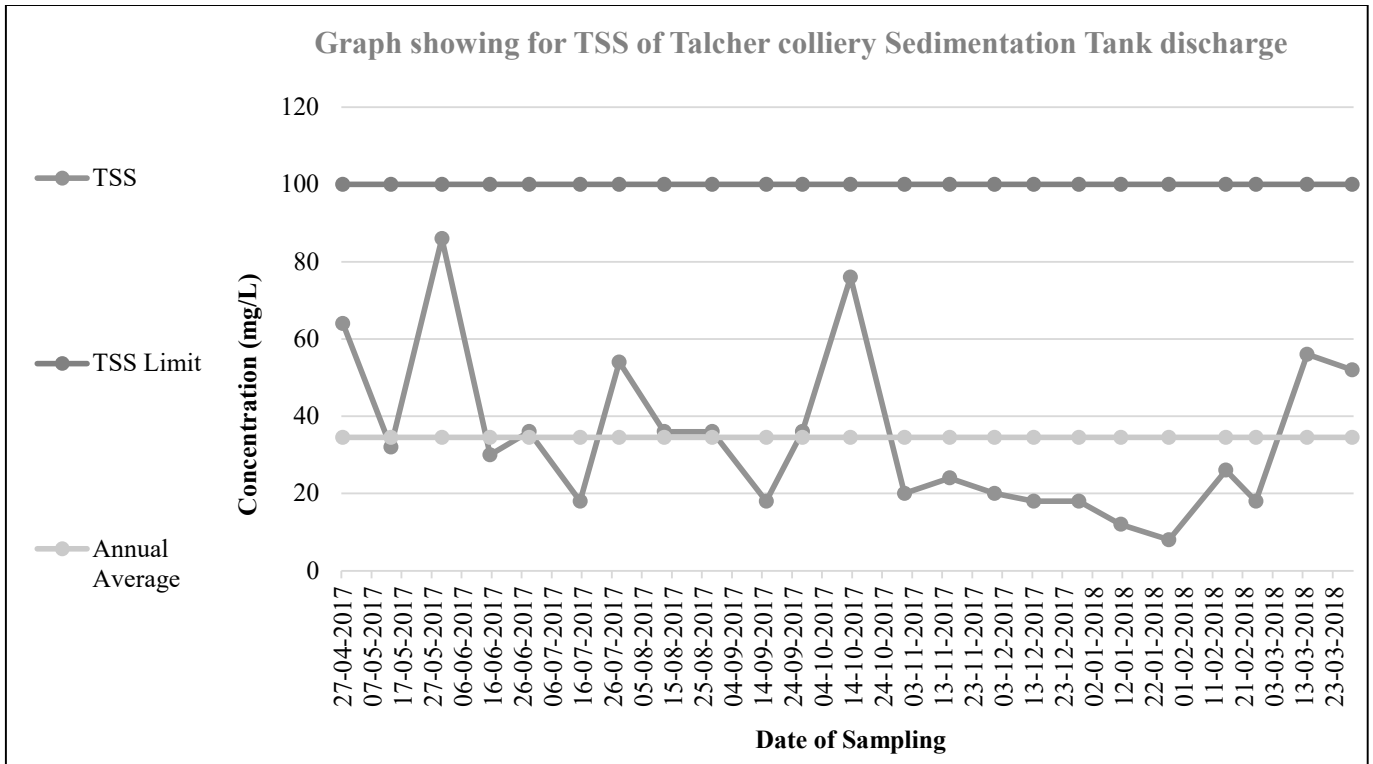
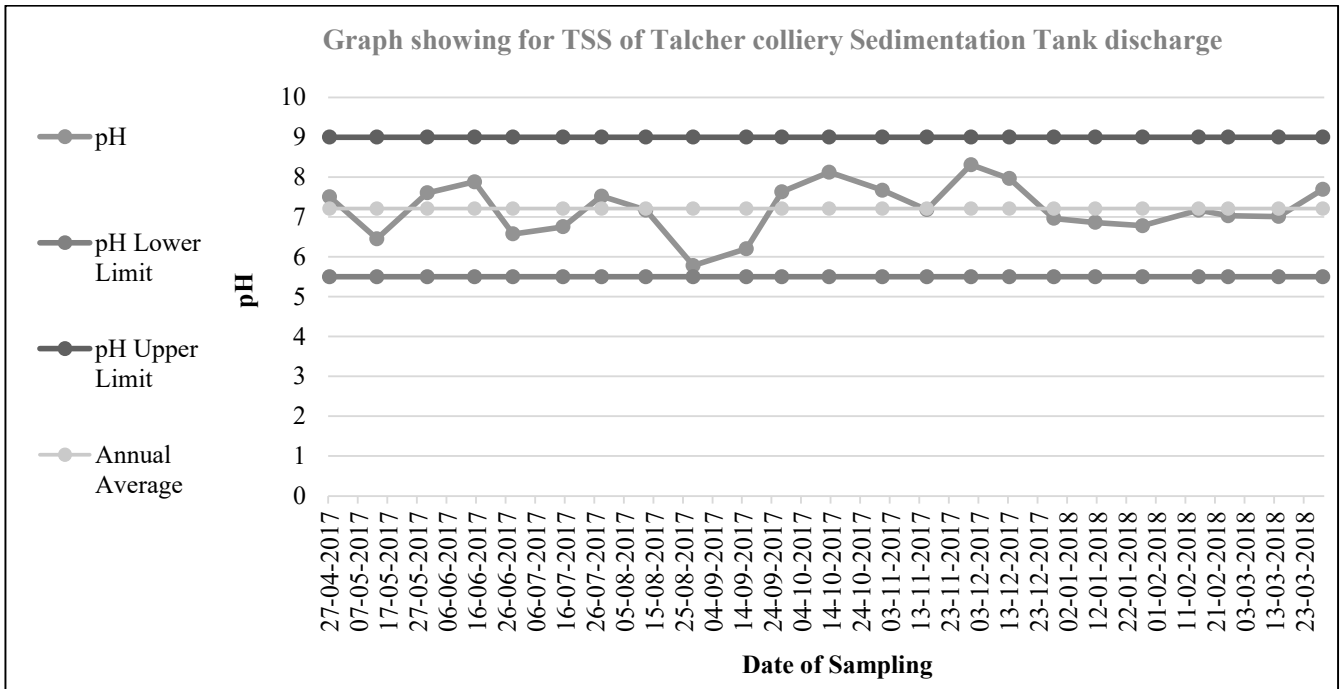


Table: 153
Project: Talcher Colliery
Monitoring Station: Talcher Colliery Sedimentation Tank Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
15/07/2017	6.8	<4.0	18	8
28/07/2017	7.5	<4.0	54	32
12/08/2017	7.2	<4.0	36	32
15/09/2017	6.2	<4.0	18	12
27/09/2017	7.6	<4.0	36	28
13/10/2017	8.1	<4.0	76	68
31/10/2017	7.7	<4.0	20	12
15/11/2017	7.2	<4.0	24	16
30/11/2017	8.3	<4.0	20	16
13/12/2017	8	<4.0	18	12
28/12/2017	7	<4.0	18	12
11/01/2018	6.9	6.2	12	32
27/01/2018	6.8	13.4	8	8
15/02/2018	7.2	9.8	26	56
25/02/2018	7	7.6	18	36
14/03/2018	7	8.4	56	8
29/03/2018	7.7	8.8	52	8
27/04/2017	7.5	<4.0	64	52
13/05/2017	6.5	<4.0	32	24
30/05/2017	7.6	<4.0	86	76
15/06/2017	7.9	<4.0	30	20
28/06/2017	6.6	<4.0	36	28
28/08/2017	5.8	<4.0	36	28

All values are in mg/L except pH



Graph showing for COD of Talcher colliery Sedimentation Tank discharge

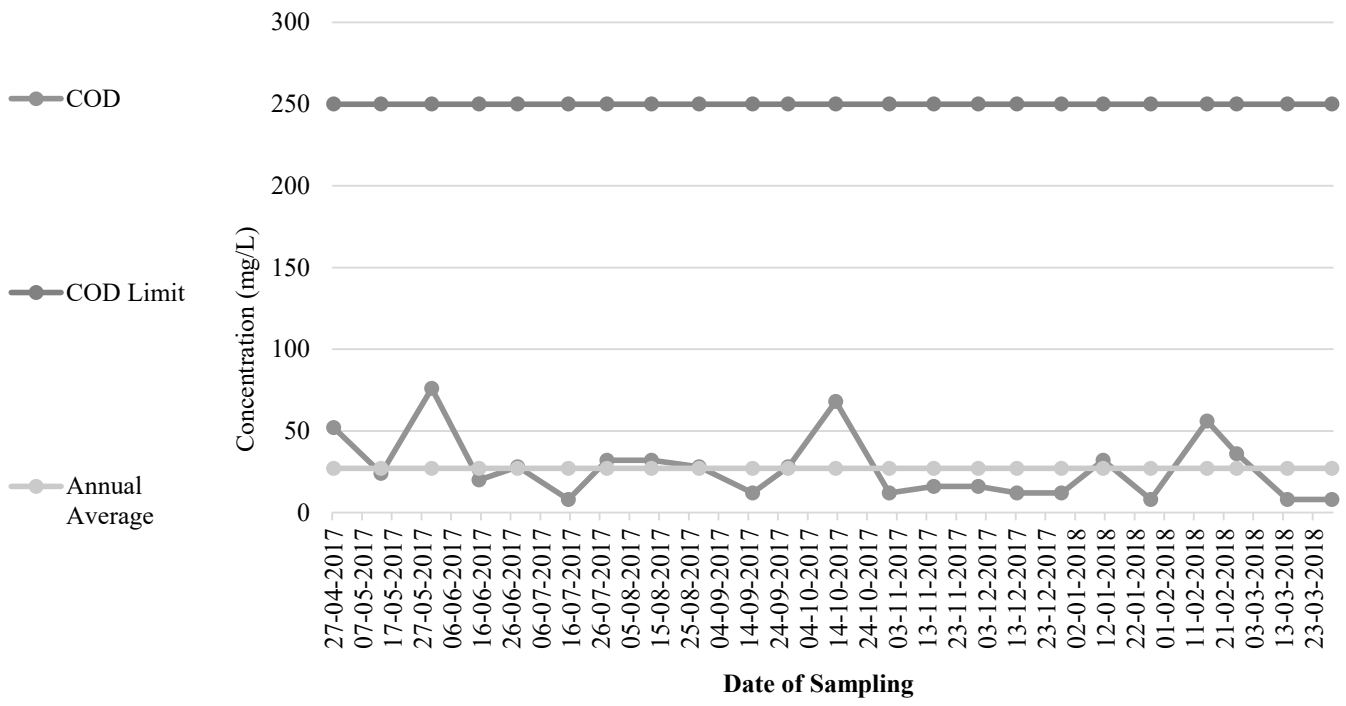
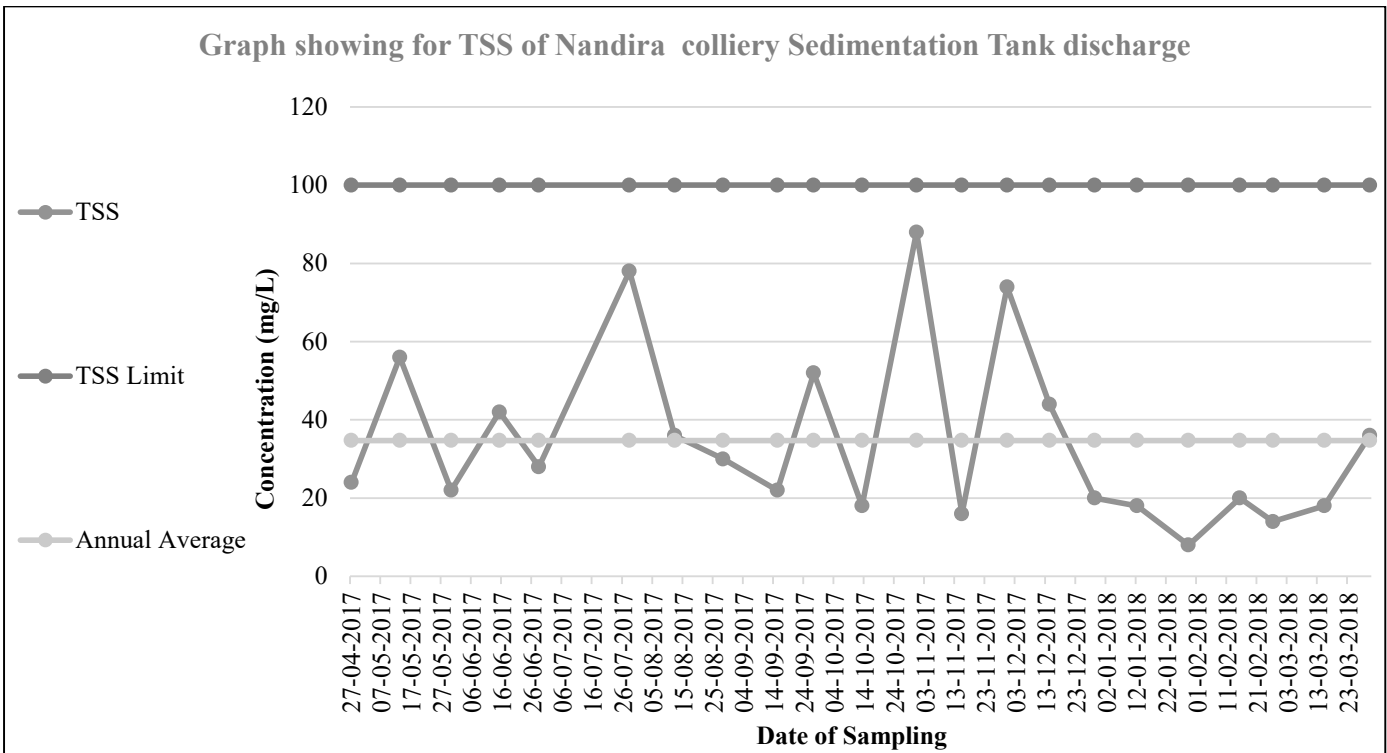
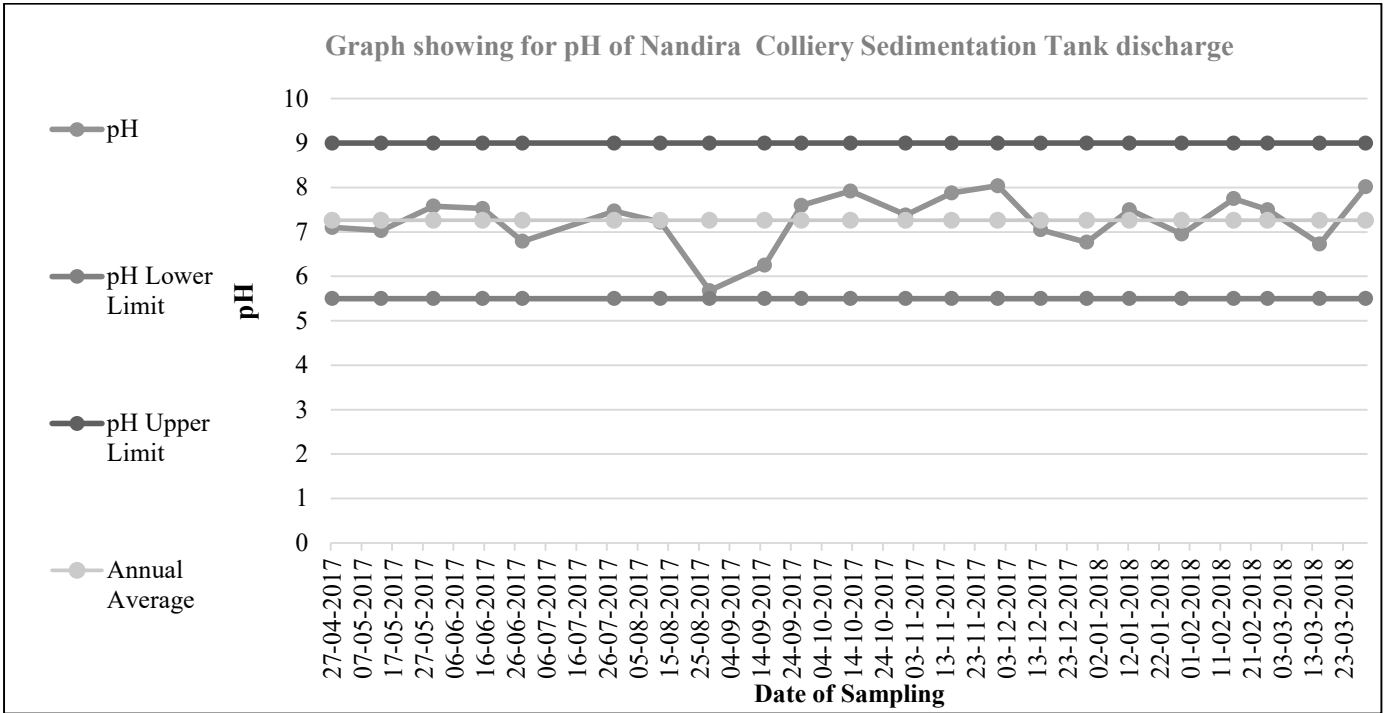


Table: 154
Project: Nandira Colliery
Monitoring Station: Nandira Colliery Sedimentation Tank Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.1	<4.0	24	20
13/05/2017	7.03	<4.0	56	32
30/05/2017	7.58	<4.0	22	12
15/06/2017	7.53	<4.0	42	36
28/06/2017	6.79	<4.0	28	20
15/07/2017	Strike	Strike	Strike	Strike
28/07/2017	7.47	<4.0	78	64
12/08/2017	7.22	<4.0	36	24
28/08/2017	5.68	<4.0	30	24
15/09/2017	6.25	<4.0	22	16
27/09/2017	7.6	<4.0	52	40
13/10/2017	7.92	<4.0	18	12
31/10/2017	7.38	<4.0	88	120
15/11/2017	7.88	<4.0	16	12
30/11/2017	8.04	<4.0	74	116
14/12/2017	7.05	<4.0	44	36
29/12/2017	6.77	<4.0	20	12
12/01/2018	7.5	4.4	18	52
29/01/2018	6.95	12.8	8	8
15/02/2018	7.75	8.6	20	44
26/02/2018	7.5	5.2	14	8
15/03/2018	6.73	6.2	18	12
30/03/2018	8.02	6	36	40

All values are in mg/L except pH



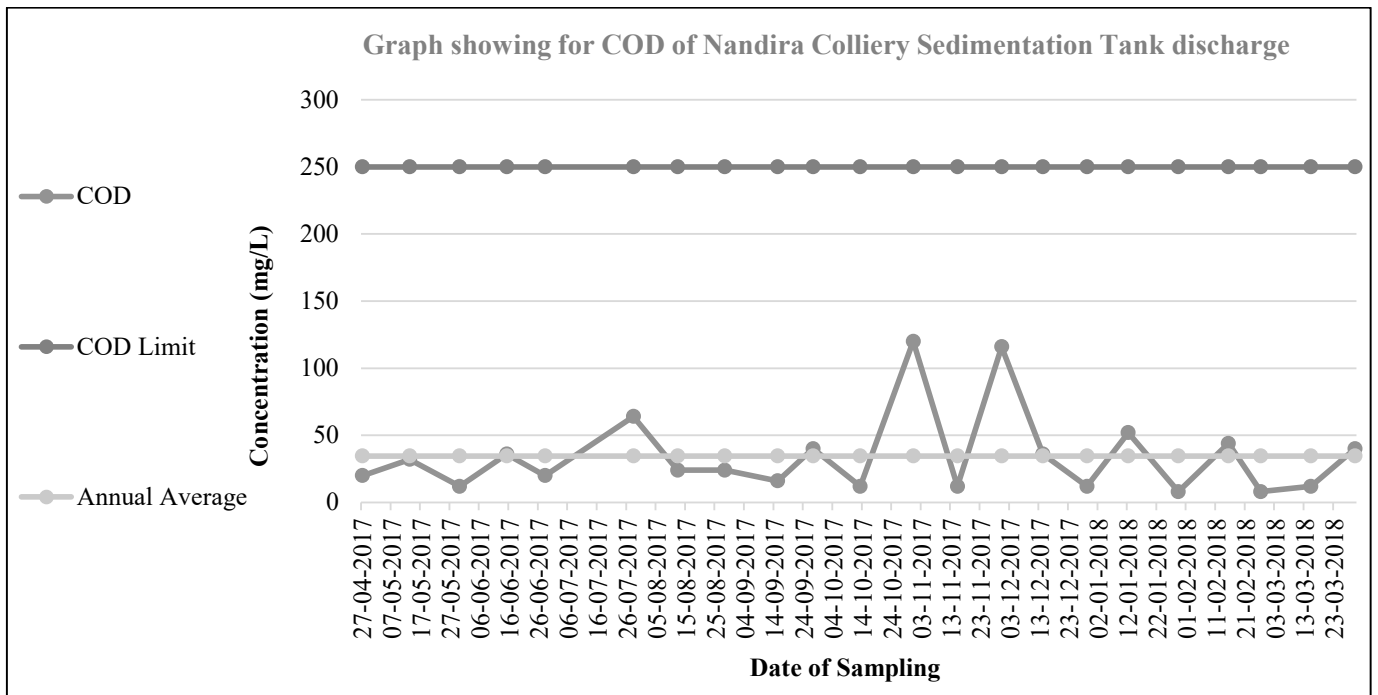
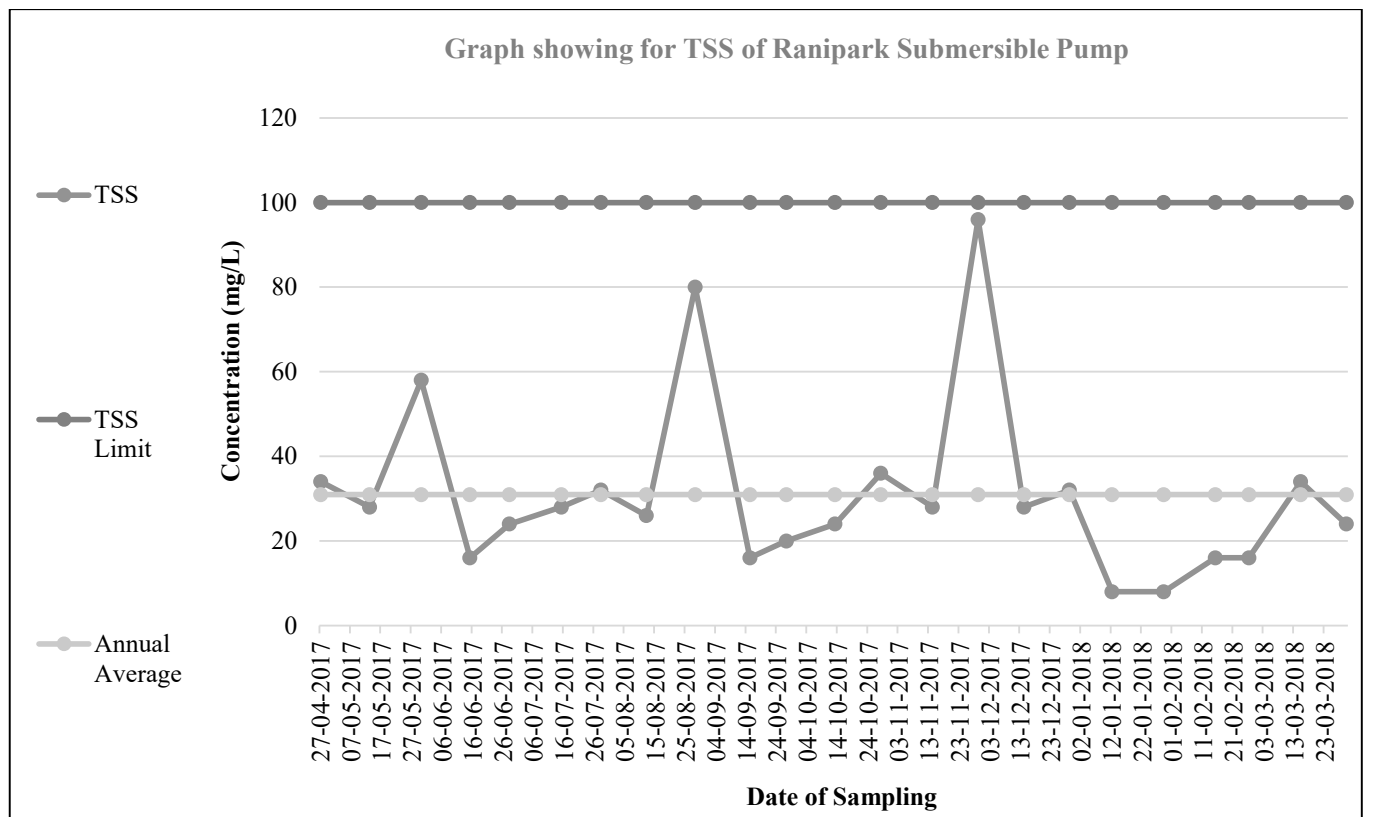
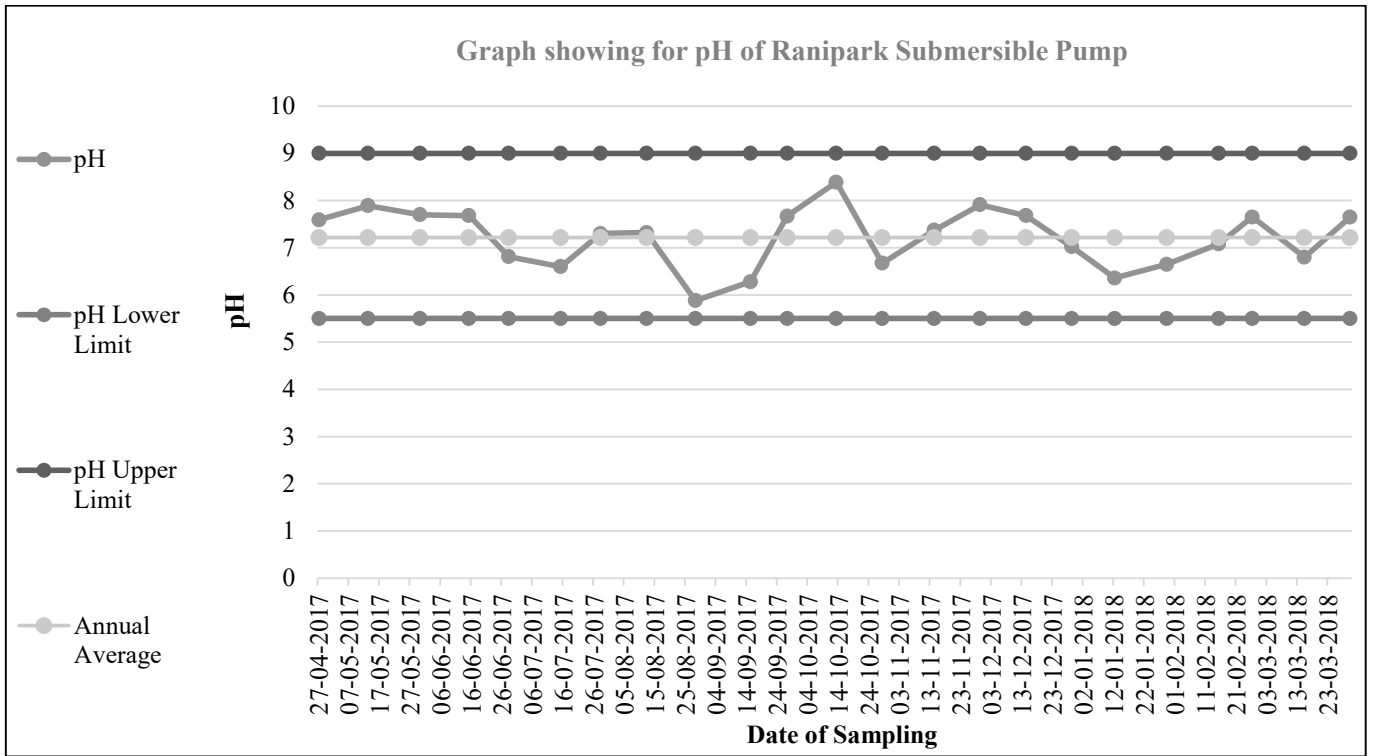


Table:155
Project: Deulbera Colliery
Monitoring Station: Rani Park Submersible Pump

Date of Sampling	pH	Oil & Grease	TSS	COD
15/09/2017	6.3	<4.0	16	12
27/09/2017	7.7	<4.0	20	8
13/10/2017	8.4	<4.0	24	16
28/10/2017	6.7	<4.0	36	20
14/11/2017	7.4	<4.0	28	20
29/11/2017	7.9	<4.0	96	100
14/12/2017	7.7	<4.0	28	24
29/12/2017	7	<4.0	32	20
12/01/2018	6.4	<4.0	8	12
29/01/2018	6.7	18.8	8	8
15/02/2018	7.1	<4.0	16	16
26/02/2018	7.7	7.2	16	8
27/04/2017	7.6	<4.0	34	24
13/05/2017	7.9	<4.0	28	20
30/05/2017	7.7	<4.0	58	40
15/06/2017	7.7	<4.0	16	8
28/06/2017	6.8	<4.0	24	8
15/07/2017	6.6	<4.0	28	16
28/07/2017	7.3	<4.0	32	28
12/08/2017	7.3	<4.0	26	16
28/08/2017	5.9	<4.0	80	72
15/03/2018	6.8	5.6	34	12
30/03/2018	7.7	10.8	24	64

All values are in mg/L except pH



Graph showing for COD of Ranipark Submersible Pump

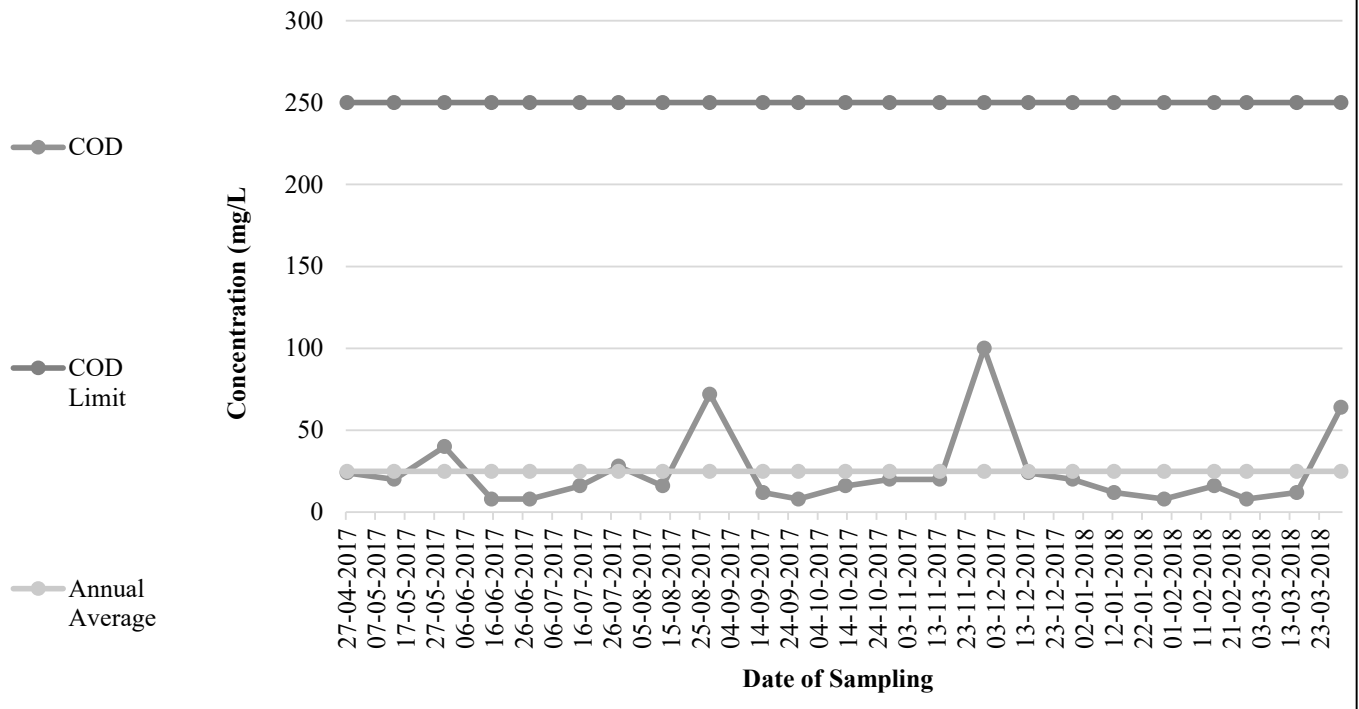
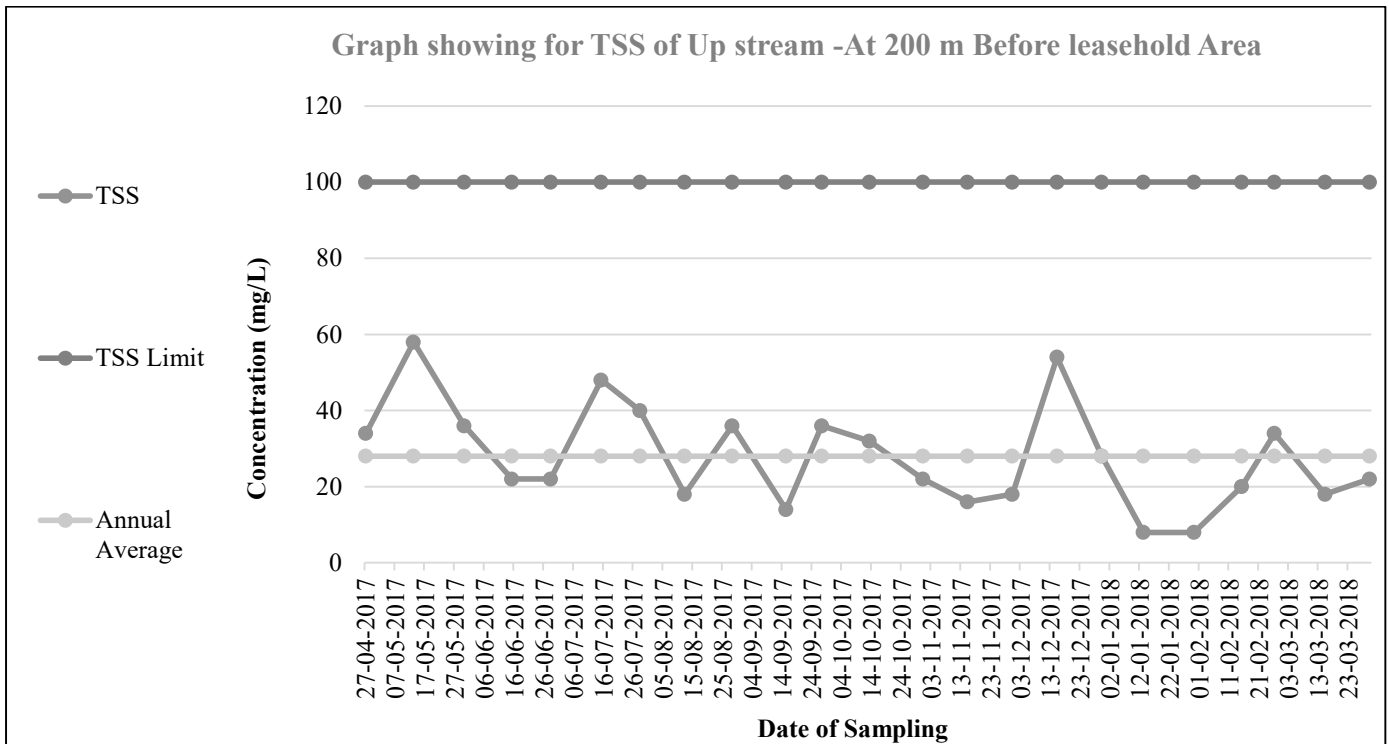
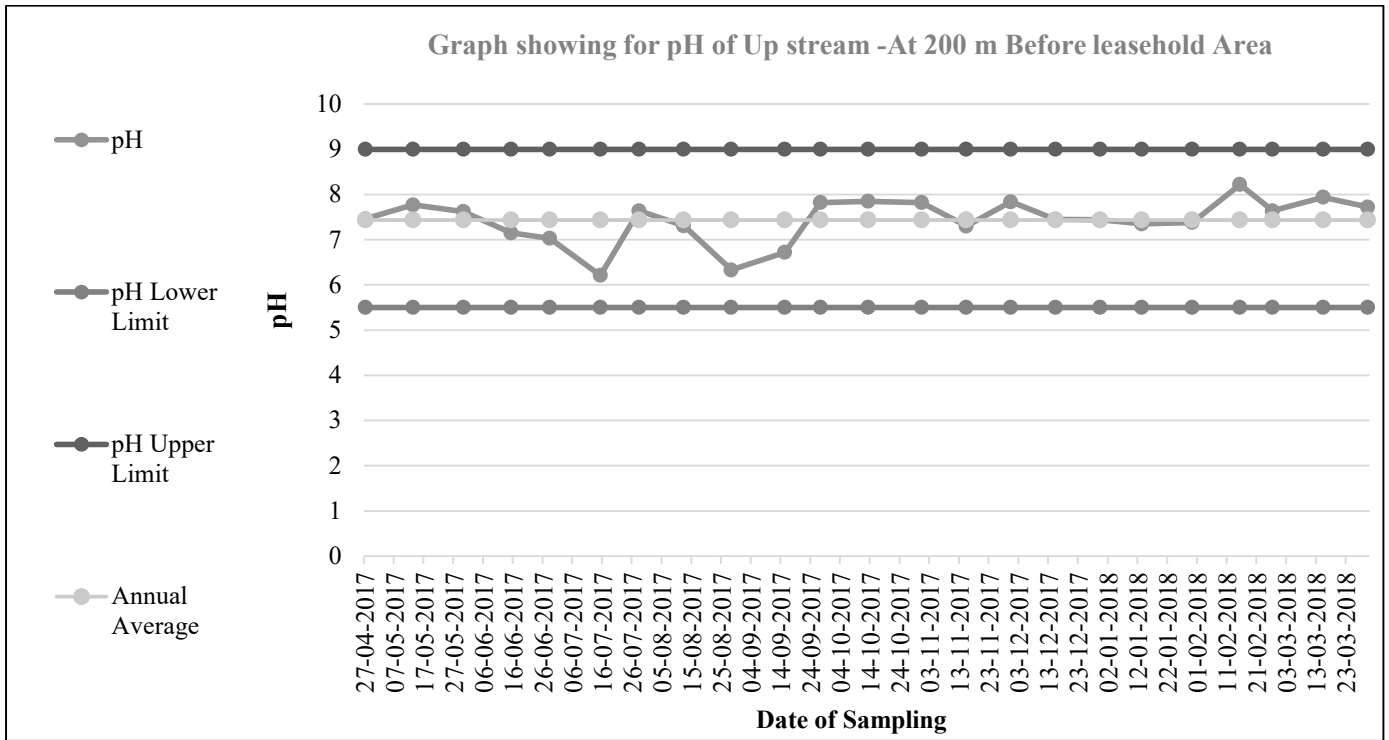


Table: 156
Project: Mandapal Sand Mine
Monitoring Station: Upstream - At 200 m Before leasehold Area

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.5	<4.0	34	16
13/05/2017	7.8	<4.0	58	36
30/05/2017	7.6	<4.0	36	24
15/06/2017	7.2	<4.0	22	16
28/06/2017	7	<4.0	22	8
15/07/2017	6.2	<4.0	48	36
28/07/2017	7.6	<4.0	40	36
12/08/2017	7.3	<4.0	18	12
28/08/2017	6.3	<4.0	36	32
15/09/2017	6.7	<4.0	14	8
27/09/2017	7.8	<4.0	36	24
13/10/2017	7.9	<4.0	32	16
31/10/2017	7.8	<4.0	22	12
15/11/2017	7.3	<4.0	16	12
30/11/2017	7.8	<4.0	18	12
15/12/2017	7.5	<4.0	54	48
30/12/2017	7.4	<4.0	28	20
13/01/2018	7.4	7.4	8	28
30/01/2018	7.4	4.6	8	8
15/02/2018	8.2	7.2	20	40
26/02/2018	7.6	5.2	34	28
15/03/2018	7.9	6.2	18	20
30/03/2018	7.7	7.8	22	24

All values are in mg/L except pH



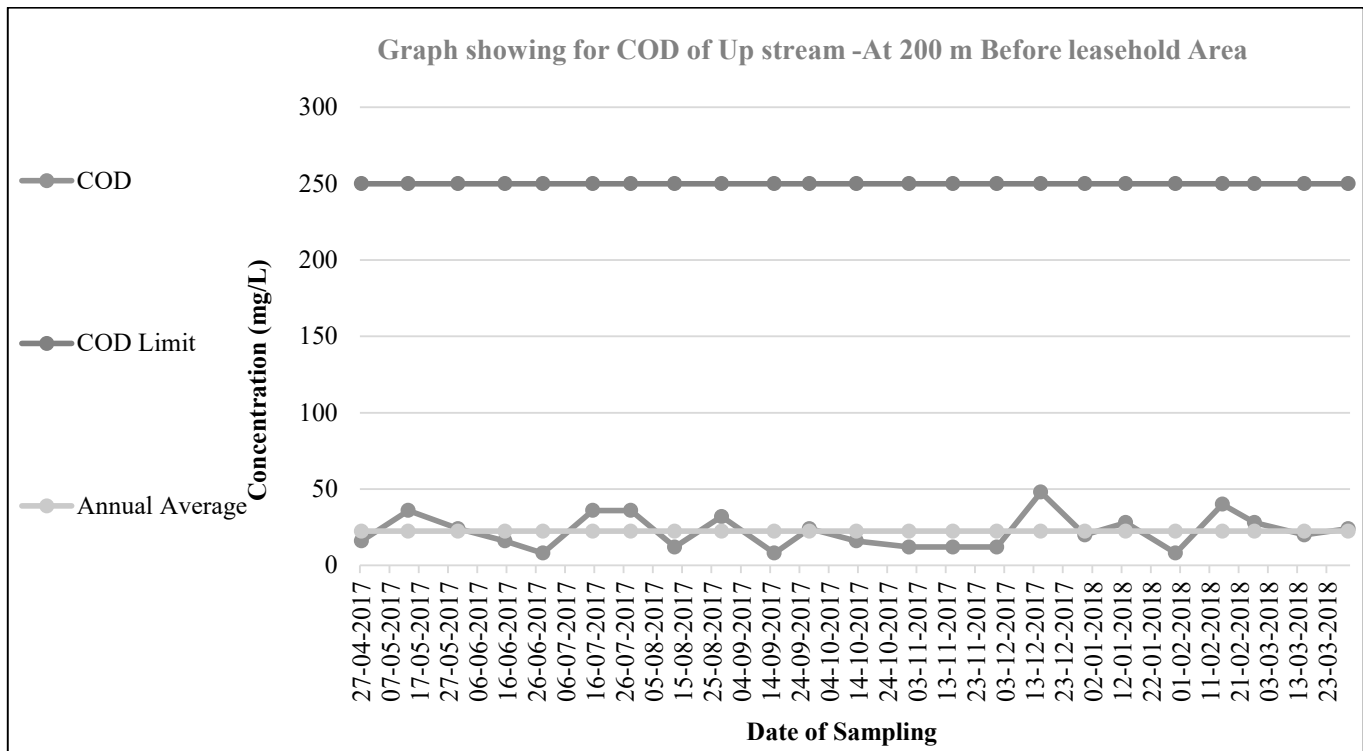
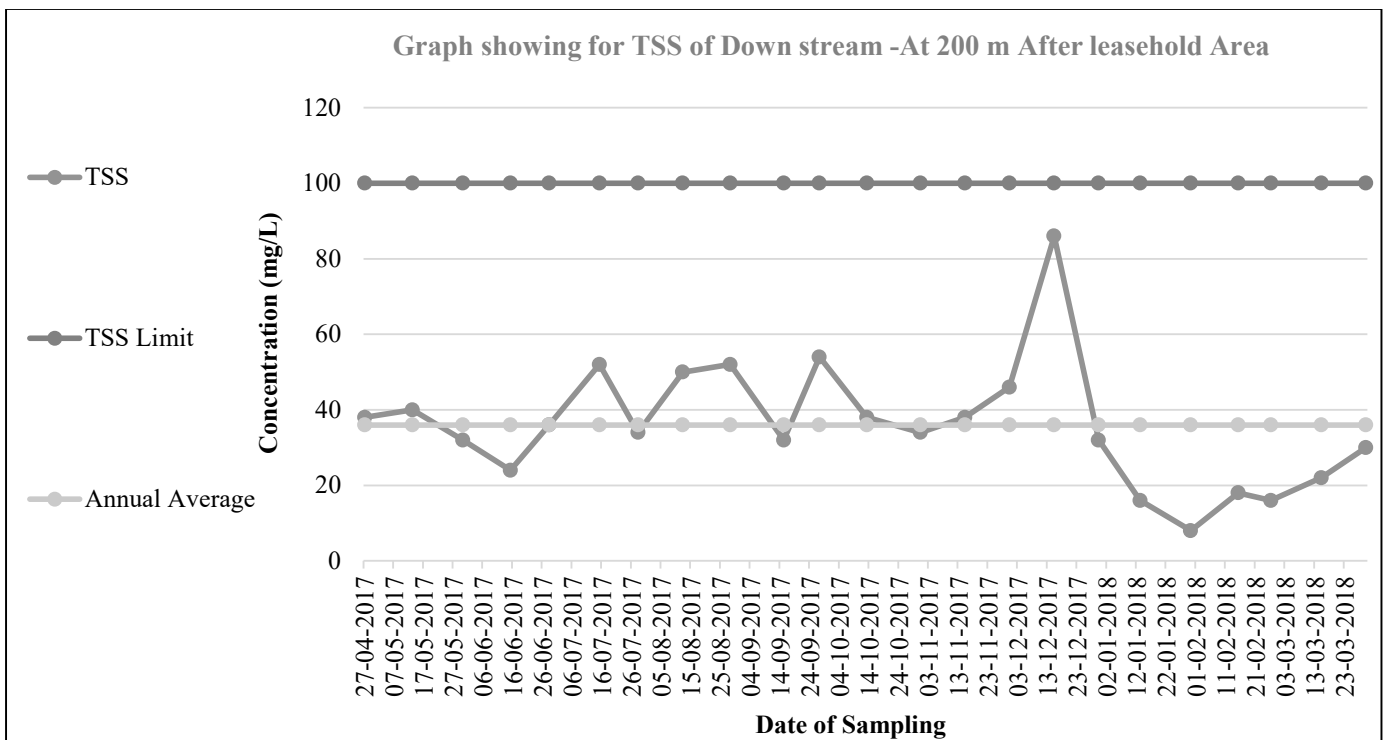
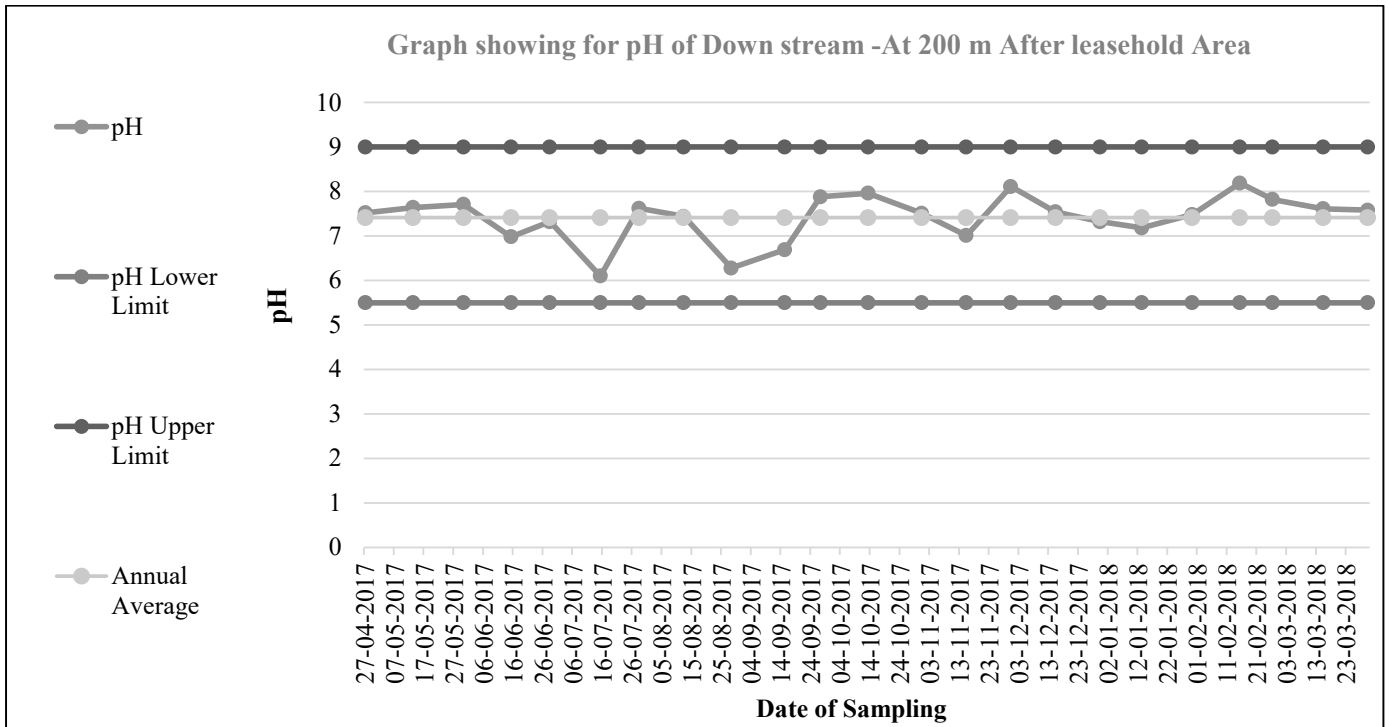


Table: 157
Project: Mandapal Sand Mine
Monitoring Station: Downstream - At 200 m Before leasehold Area

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.5	<4.0	38	24
13/05/2017	7.6	<4.0	40	28
30/05/2017	7.7	<4.0	32	20
15/06/2017	7	<4.0	24	8
28/06/2017	7.3	<4.0	36	24
15/07/2017	6.1	<4.0	52	44
28/07/2017	7.6	<4.0	34	28
12/08/2017	7.4	<4.0	50	44
28/08/2017	6.3	<4.0	52	44
15/09/2017	6.7	<4.0	32	24
27/09/2017	7.9	<4.0	54	22
13/10/2017	8	<4.0	38	24
31/10/2017	7.5	<4.0	34	28
15/11/2017	7	<4.0	38	32
30/11/2017	8.1	<4.0	46	40
15/12/2017	7.5	<4.0	86	72
30/12/2017	7.3	<4.0	32	24
13/01/2018	7.2	5.2	16	100
30/01/2018	7.5	7.8	8	12
15/02/2018	8.2	8.8	18	40
26/02/2018	7.8	5.2	16	8
15/03/2018	7.6	9	22	8
30/03/2018	7.6	6.8	30	20

All values are in mg/L except pH



Graph showing for COD of Down stream -At 200 m After leasehold Area

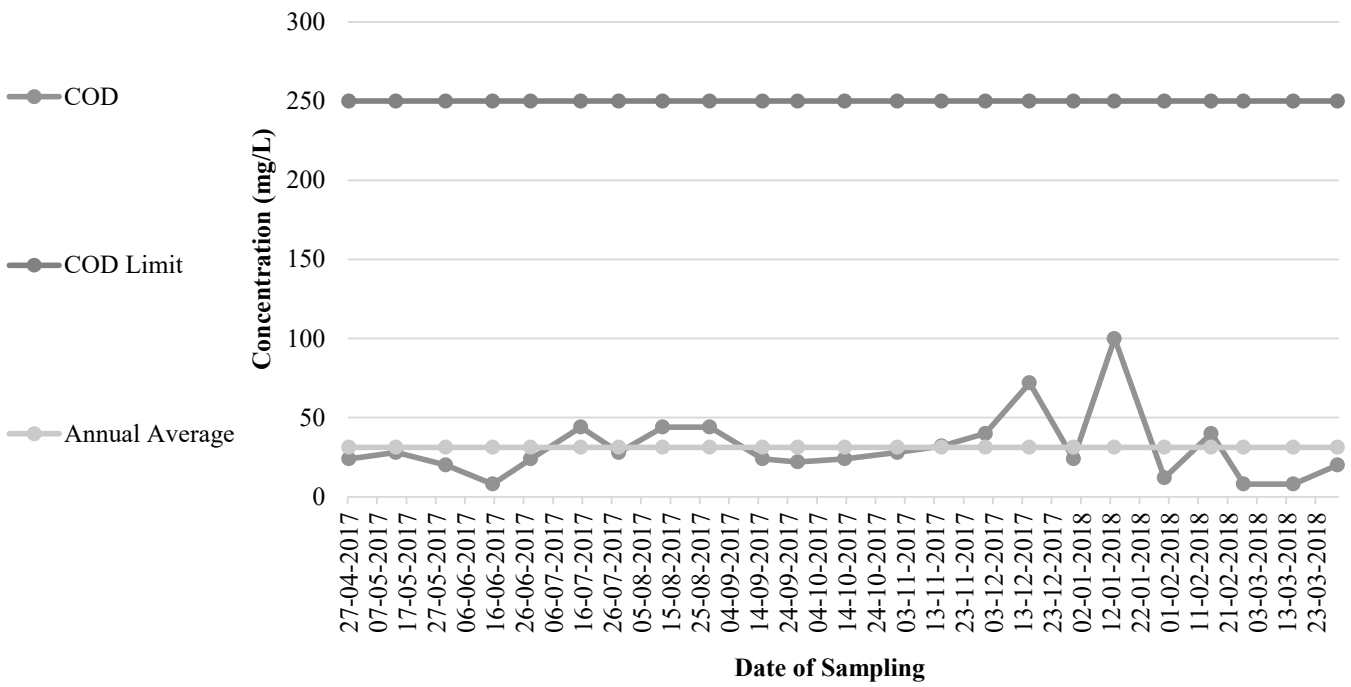
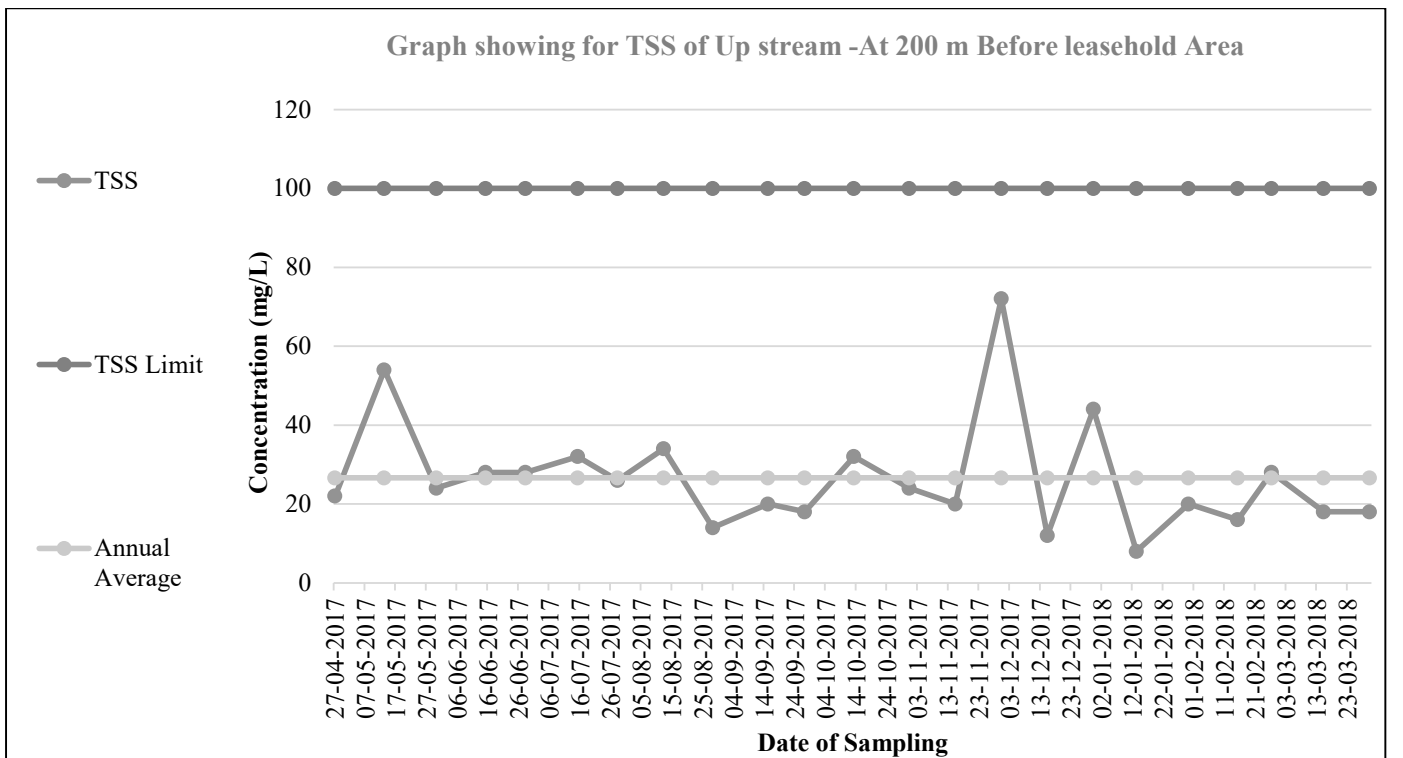
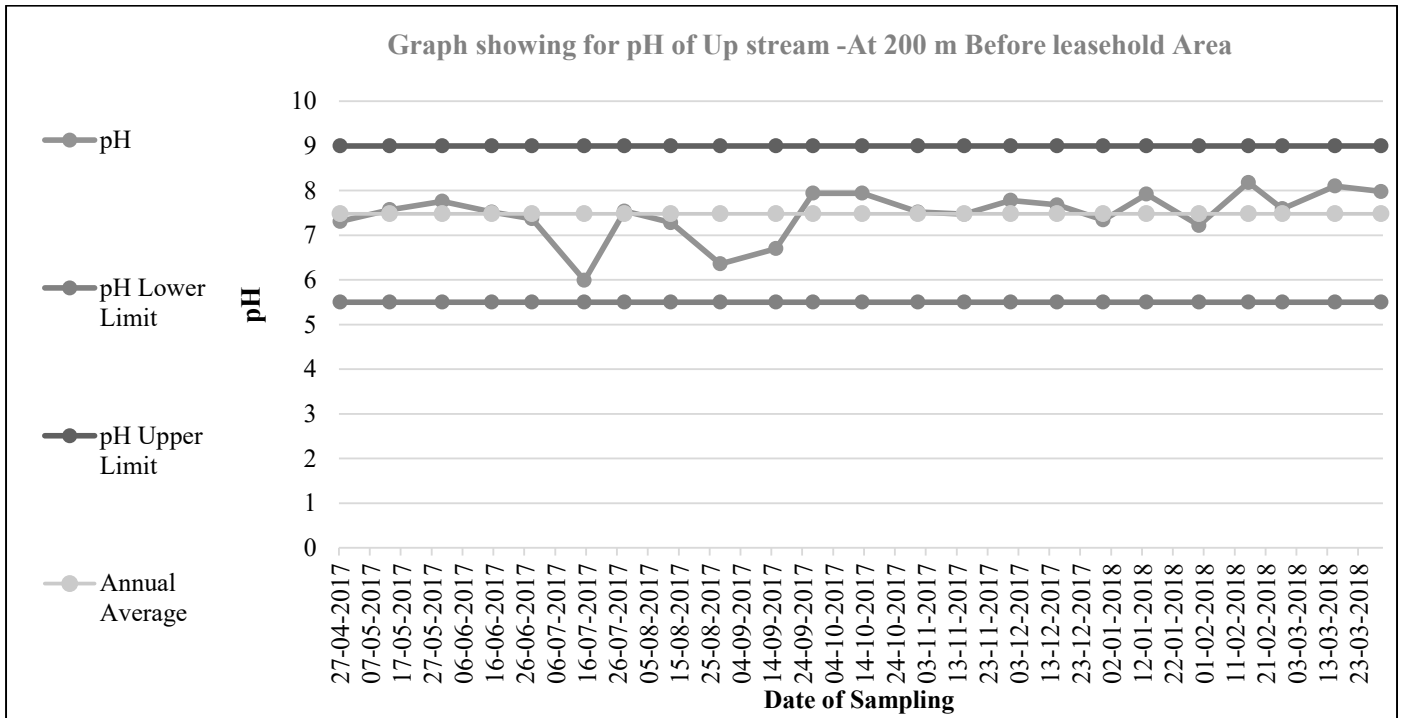


Table: 158
Project: Kakudi and Kishoripal Sand Mine
Monitoring Station: Upstream - At 200 m Before leasehold Area

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.3	<4.0	22	8
13/05/2017	7.6	<4.0	54	40
30/05/2017	7.8	<4.0	24	16
15/06/2017	7.5	<4.0	28	16
28/06/2017	7.4	<4.0	28	12
15/07/2017	6	<4.0	32	12
28/07/2017	7.5	<4.0	26	16
12/08/2017	7.3	<4.0	34	24
28/08/2017	6.4	<4.0	14	20
15/09/2017	6.7	<4.0	20	8
27/09/2017	7.9	<4.0	18	12
13/10/2017	7.9	<4.0	32	20
31/10/2017	7.5	<4.0	24	16
15/11/2017	7.5	<4.0	20	16
30/11/2017	7.8	<4.0	72	68
15/12/2017	7.7	<4.0	12	8
30/12/2017	7.3	<4.0	44	24
13/01/2018	7.9	<4.0	8	8
30/01/2018	7.2	9.2	20	8
15/02/2018	8.2	6.2	16	32
26/02/2018	7.6	6.2	28	28
15/03/2018	8.1	9.4	18	20
30/03/2018	8	4.4	18	12

All values are in mg/L except pH



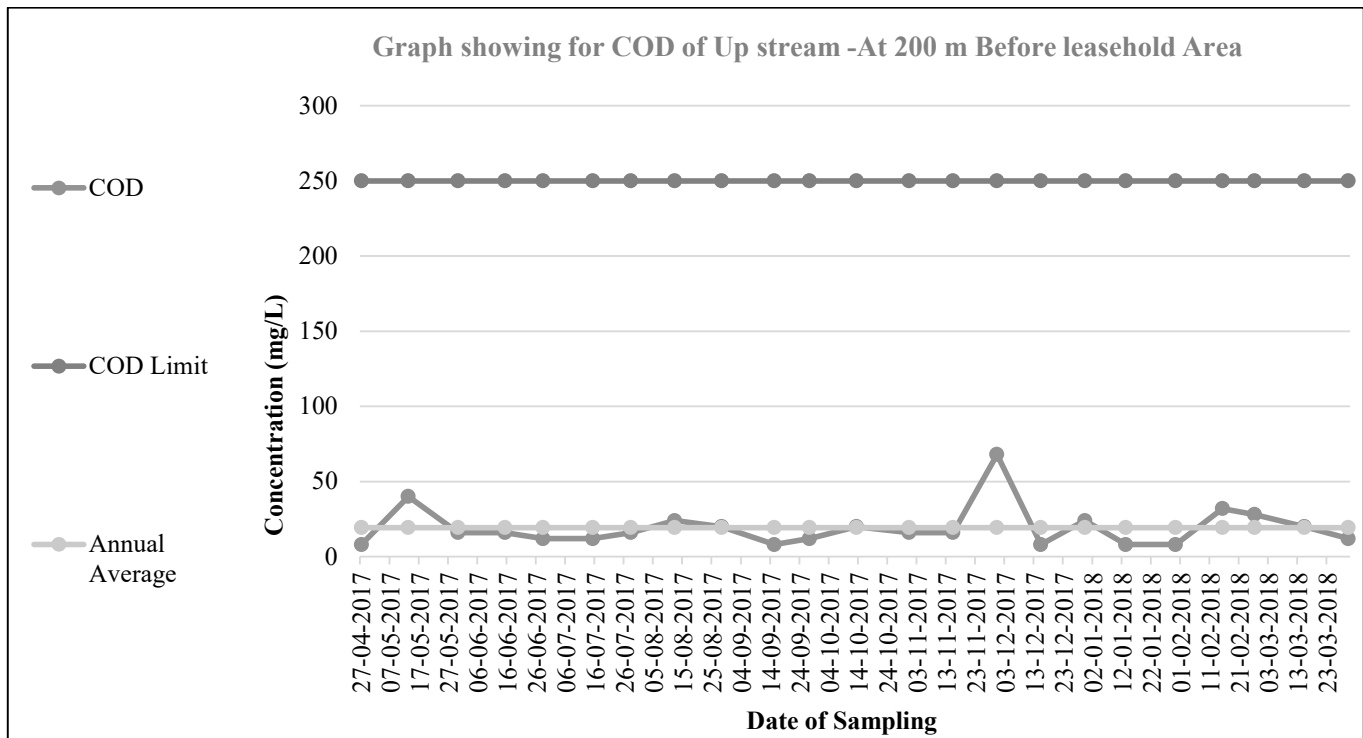
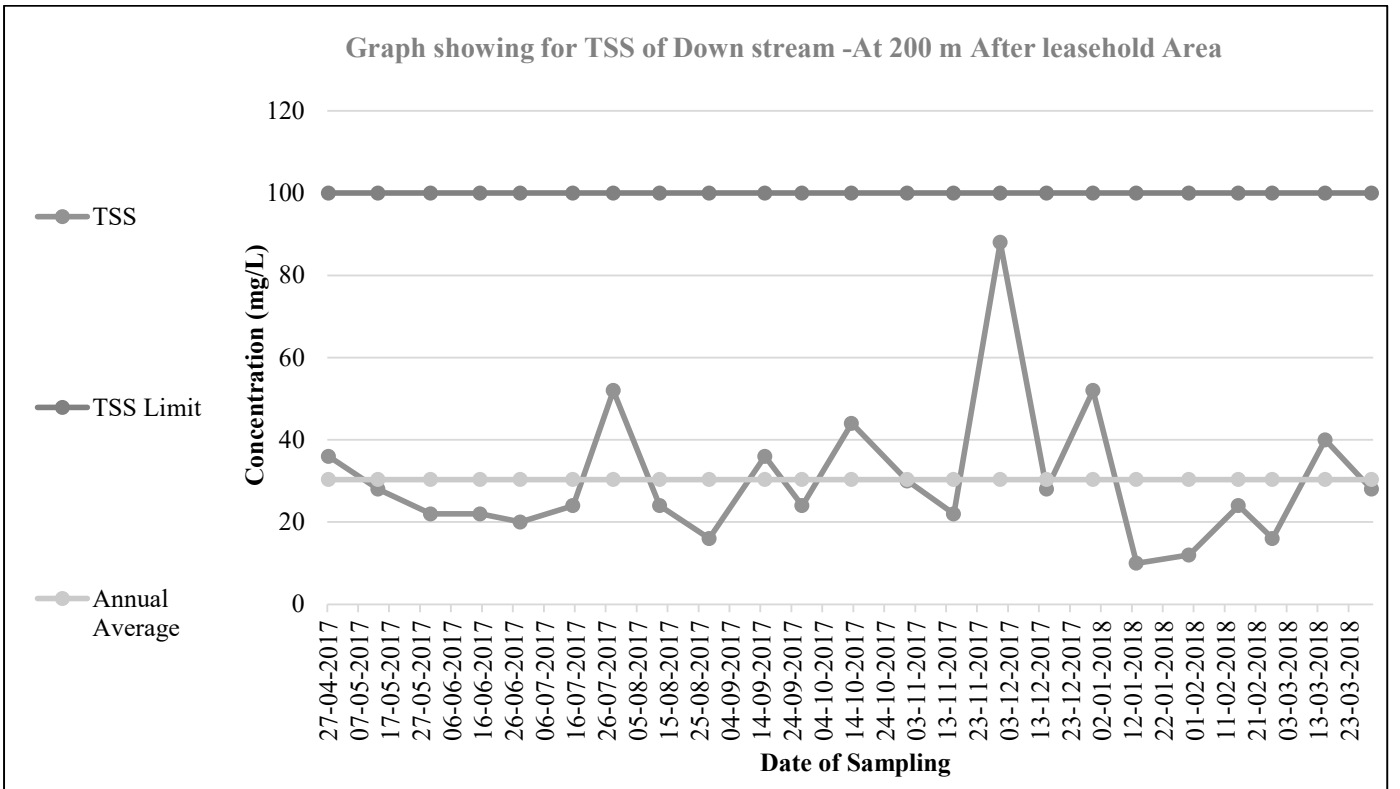
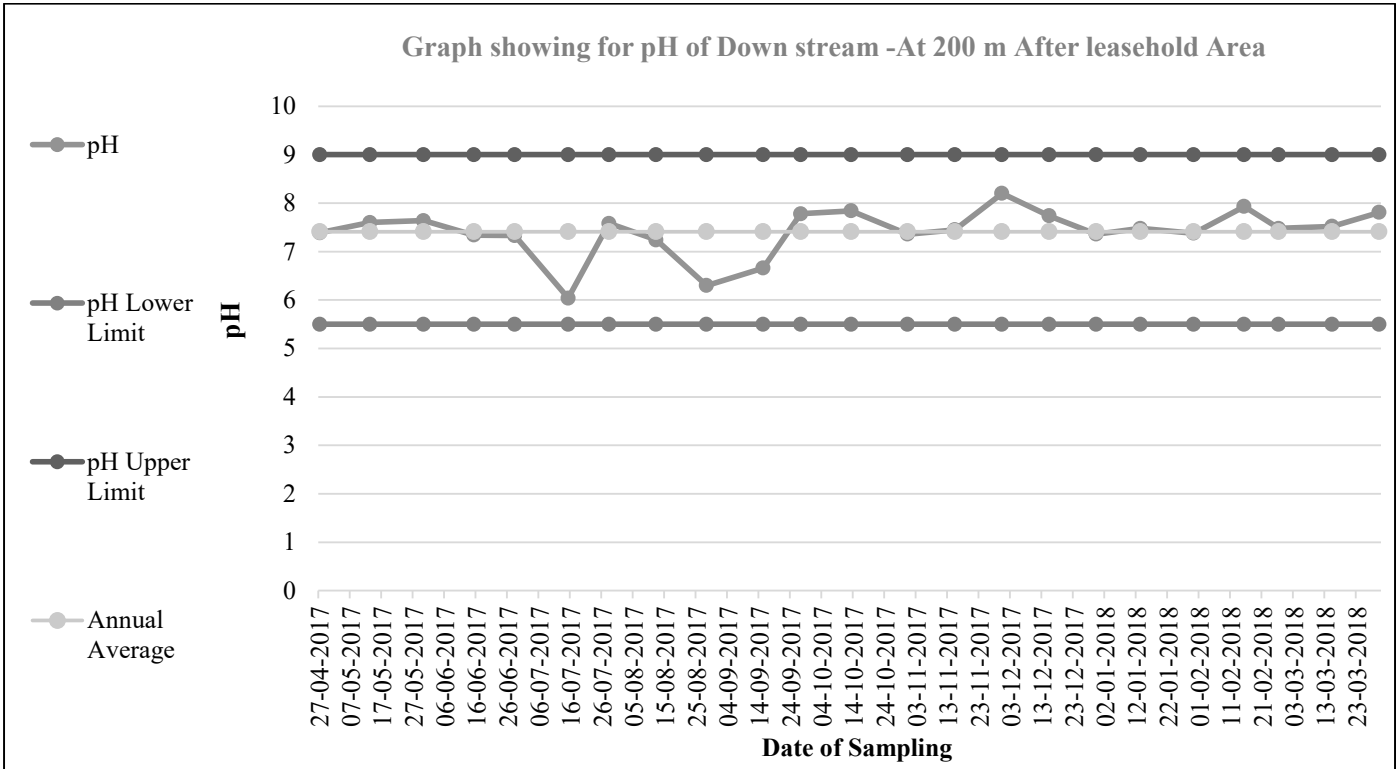


Table: 159
Project: Kakudi and Kishoripal Sand Mine
Monitoring Station: Downstream - At 200 m Before leasehold Area

Date of Sampling	pH	Oil & Grease	TSS	COD
27/04/2017	7.4	<4.0	36	24
13/05/2017	7.6	<4.0	28	20
30/05/2017	7.6	<4.0	22	8
15/06/2017	7.3	<4.0	22	16
28/06/2017	7.3	<4.0	20	8
15/07/2017	6	<4.0	24	12
12/08/2017	7.2	<4.0	24	12
15/03/2018	7.5	7.8	40	12
28/07/2017	7.6	<4.0	52	44
28/08/2017	6.3	<4.0	16	20
15/09/2017	6.7	<4.0	36	24
27/09/2017	7.8	<4.0	24	12
13/10/2017	7.8	<4.0	44	24
31/10/2017	7.4	<4.0	30	20
15/11/2017	7.5	<4.0	22	16
30/11/2017	8.2	<4.0	88	112
15/12/2017	7.7	<4.0	28	20
30/12/2017	7.4	<4.0	52	36
13/01/2018	7.5	8	10	32
30/01/2018	7.4	10.8	12	24
15/02/2018	7.9	<4.0	24	44
26/02/2018	7.5	3.8	16	8
30/03/2018	7.8	10.4	28	8

All values are in mg/L except pH



Graph showing for TSS of Down stream -At 200 m After leasehold Area

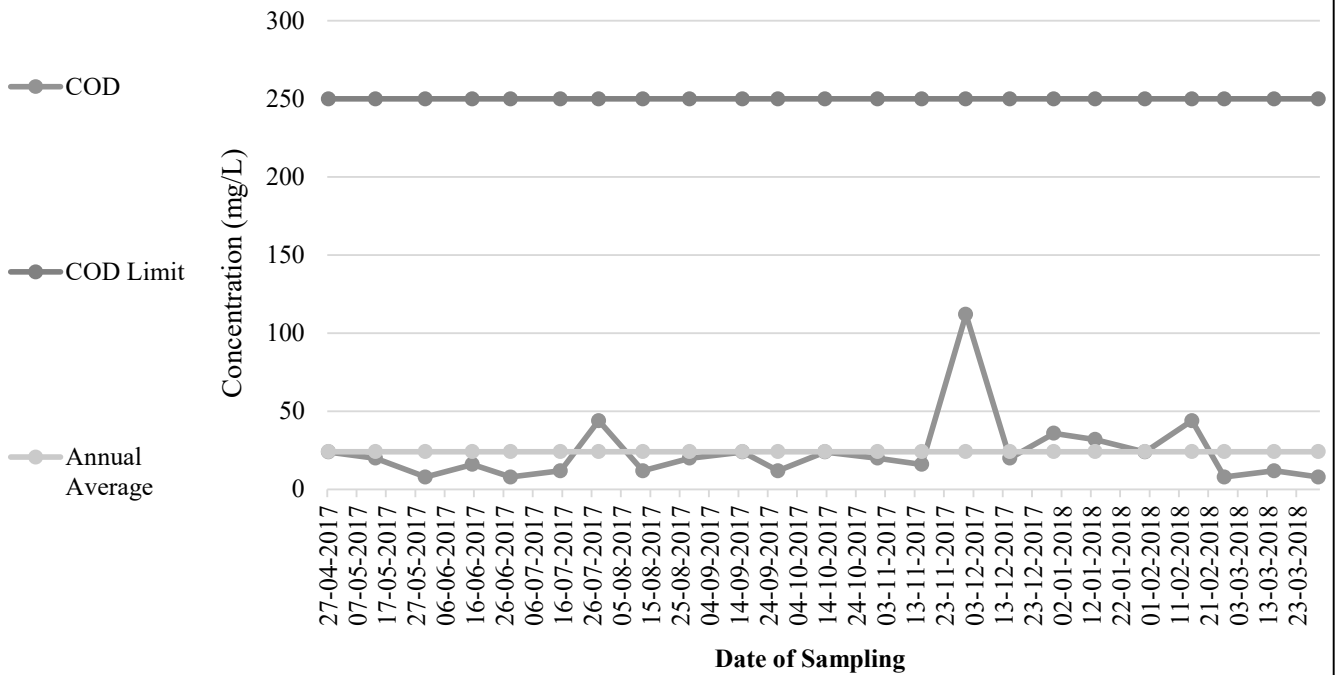


Table: 160

Effluent Quality (all Parameter): Jagannath Area

Project (OCP / UG)	Jagannath	Jagannath	Bhubaneswari	MoEF-Sch-VI Standards
Name of the Station	West Sump Water	Central Sump Water	Mine Sump Water	
Date	14-11-2017	14-11-2017	13-11-2017	
Colour (Hazen)	2	2	5	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
Temperature (°C)	21 ⁰ C	20 ⁰ C	22 ⁰ C	Shall not exceed 5 °C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	3.12	1.38	10.0
BOD [3 days at 27 °C] (mg/L)	2.4	2.5	3.2	30.0
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.05	<0.05	<0.05	2.0
Copper(mg/L)	<0.03	<0.03	<0.03	3.0
Zinc(mg/L)	0.38	0.13	<0.02	5.0
Nickel(mg/L)	0.52	0.08	0.05	3.0
Fluoride(mg/L)	1.06	1.17	0.82	2.0
Manganese(mg/L)	4.75	0.42	<0.02	2.0
Iron(mg/L)	<0.06	<0.06	<0.06	3.0
Disolved Phosphate(mg/L)	0.124	0.109	0.218	5.0

Table: 161
Effluent Quality (all Parameter): Lingaraj Area

Project (OCP / UG)	Lingaraj	MoEF-Sch-VI Standards
Name of the Station	Outlet of MDTP	
Date	15-11-2017	
Colour(Hazen)	5	Acceptable
Odour	Unobjectionable	Unobjectionable
Temperature(^o C)	21 ^o C	Shall not exceed 5 ^o C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	10
BOD [3 days at 27oC] (mg/L)	3.3	30
Hexavalent Chromium(mg/L)	<0.01	0.1
Total Chromium(mg/L)	<0.05	2
Copper(mg/L)	<0.03	3
Zinc(mg/L)	0.03	5
Nickel(mg/L)	0.02	3
Fluoride(mg/L)	0.16	2
Manganese(mg/L)	0.02	2
Iron(mg/L)	0.36	3
Disolved Phosphate(mg/L)	0.296	5

Table: 162

Effluent Quality (all Parameter): Kaniha Area

Project (OCP / UG)	Kaniha	MoEF-Sch-VI Standards
Name of the Station	Outlet of MDTP if disch. outside	
Date	14-11-2017	
Colour(Hazen)	2	Acceptable
Odour	Unobjectionable	Unobjectionable
Temperature (°C)	22 ⁰ C	Shall not exceed 5 °C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	10.0
BOD [3 days at 27 °C] (mg/L)	2.5	30.0
Hexavelent Chromium(mg/L)	0.04	0.1
Total Chromium(mg/L)	<0.05	2.0
Copper(mg/L)	<0.03	3.0
Zinc(mg/L)	<0.02	5.0
Nickel(mg/L)	<0.02	3.0
Fluoride(mg/L)	0.16	2.0
Manganese(mg/L)	<0.02	2.0
Iron(mg/L)	0.15	3.0
Disolved Phosphate(mg/L)	0.093	5.0

Table: 163

Effluent Quality (all Parameter): Talcher Area

Project (OCP / UG)	Talcher colliery	Nandira colliery	MoEF-Sch-VI Standards
Name of the Station	Talcher colliery Sedimentation Tank discharge	Nandira colliery Sedimentation Tank discharge	
Date	13-11-2017	14-11-2017	
Colour(Hazen)	2	2	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(°C)	23°C	20°C	Shall not exceed 5 °C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	<1.0	10.0
BOD [3 days at 27 °C] (mg/L)	3.1	2.7	30.0
Hexavalent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.05	<0.05	2.0
Copper(mg/L)	<0.03	<0.03	3.0
Zinc(mg/L)	<0.02	<0.02	5.0
Nickel(mg/L)	<0.02	<0.02	3.0
Fluoride(mg/L)	0.25	0.32	2.0
Manganese(mg/L)	<0.02	<0.02	2.0
Iron(mg/L)	0.19	<0.06	3.0
Disolved Phosphate(mg/L)	0.156	0.14	5.0

Table: 164

Effluent Quality (all Parameter): Talcher Area

Project (OCP / UG)	Deulbera colliery	Deulbera colliery	MoEF-Sch-VI Standards
Name of the Station	Deulbera colliery mine discharge	Rani park Submersible pump	
Date	14-11-2017	14-11-2017	
Colour(Hazen)	2	5	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(°C)	21°C	20°C	Shall not exceed 5 °C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	<1.0	10.0
BOD [3 days at 27 °C] (mg/L)	3.2	3.3	30.0
Hexavalent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.05	<0.05	2.0
Copper(mg/L)	<0.03	<0.03	3.0
Zinc(mg/L)	2.55	<0.02	5.0
Nickel(mg/L)	<0.02	<0.02	3.0
Fluoride(mg/L)	0.35	0.19	2.0
Manganese(mg/L)	0.114	<0.02	2.0
Iron(mg/L)	<0.06	0.19	3.0
Disolved Phosphate(mg/L)	0.124	0.249	5.0

Table: 165

Effluent Quality (all Parameter): Talcher Area

Project (OCP / UG)	Handhidhua Colliery	Mandpal Sand mine	Mandpal Sand mine	MoEF-Sch-VI Standards
Name of the Station	Handhidhua Colliery mine discharge	Up stream -At 200 m Before leasehold Area	Down stream - At 200 m Before leasehold Area	
Date	14-11-2017	15-11-2017	15-11-2017	
Colour(Hazen)	5	2	2	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(°C)	23 ⁰ C	21 ⁰ C	21 ⁰ C	Shall not exceed 5 °C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	<1.0	<1.0	10.0
BOD [3 days at 27 °C] (mg/L)	3.4	2.8	2.9	30.0
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.05	<0.05	<0.05	2.0
Copper(mg/L)	<0.03	<0.03	<0.03	3.0
Zinc(mg/L)	<0.02	<0.02	0.1	5.0
Nickel(mg/L)	0.02	<0.02	<0.02	3.0
Fluoride(mg/L)	1.19	0.35	0.37	2.0
Manganese(mg/L)	<0.02	<0.02	<0.02	2.0
Iron(mg/L)	<0.06	<0.06	<0.06	3.0
Disolved Phosphate(mg/L)	0.265	0.14	0.187	5.0

Table: 166

Effluent Quality (all Parameter): Talcher Area

Project (OCP / UG)	Kakudi & Kishoripal Sand mine	Kakudi & Kishoripal Sand mine	MoEF-Sch-VI Standards
Name of the Station	Up stream -At 200 m Before leasehold Area	Down stream -At 200 m Before leasehold Area	
Date	15-11-2017	15-11-2017	
Colour(Hazen)	2	2	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(°C)	20 ⁰ C	23 ⁰ C	Shall not exceed 5 °C above the receiving temperature
Nitrate Nitrogen(mg/L)	<1.0	<1.0	10.0
BOD [3 days at 27 °C] (mg/L)	2.3	2.6	30.0
Hexavalent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.05	<0.05	2.0
Copper(mg/L)	<0.03	<0.03	3.0
Zinc(mg/L)	<0.02	<0.02	5.0
Nickel(mg/L)	<0.02	0.02	3.0
Fluoride(mg/L)	0.17	0.16	2.0
Manganese(mg/L)	<0.02	<0.02	2.0
Iron(mg/L)	0.18	0.18	3.0
Disolved Phosphate(mg/L)	0.109	0.171	5.0

TABLES FOR SURFACE WATER QUALITY DATA

Table: 167
Surface Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP

Monitoring Station: Bangarujhor Stream near Sareila Village as d/s Water of Bhubaneswari OCP before joining Brahmani River

Project/OCP	Bhubaneswari OCP			IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangarujhor Stream near Sareila Village as d/s Water of Bhubaneswari OCP before joining Brahmani River			
Date of sampling	27.04.17	14/07/2017	13/10/2017	
pH	DRY	7.23	8.24	6.5-8.5
Dissolved Oxygen(mg/L)	DRY	5.8	4.7	4
BOD (3 days 27 °C (mg/L)	DRY	3.4	3.2	3
Color (Hazen unit)	DRY	5	3	300
Total dissolved solids (mg/L)	DRY	440	388	1500
TSS(mg/L)	DRY	22	16	-
Total Hardness(mg/L)	DRY	228	236	-
Copper(mg/L)	DRY	<0.03	<0.03	1.5
Iron(mg/L)	DRY	<0.06	<0.06	50
Chlorides(mg/L)	DRY	28	26	600
Sulphate(mg/L)	DRY	158	96	400
Nitrate(mg/L)	DRY	5.37	4.43	50
Fluoride(mg/L)	DRY	0.49	0.72	1.5
Phenolics (mg/L)		<0.001		0.005
Cadmium(mg/L)	DRY	<0.0005	0.005	0.01
Selenium(mg/L)	DRY	<0.002	<0.002	0.05
Arsenic(mg/L)	DRY	0.003	0.003	0.2
Lead(mg/L)	DRY	<0.005	<0.005	0.1
Zinc(mg/L)	DRY	<0.02	0.25	15
Hexavalent Chromium(mg/L)	DRY	<0.01	<0.02	0.05
Oil & Grease	DRY	<4.0	<4.0	0.1

Table: 168
Surface Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Bangarujhor Stream near Khaisa Pala Village as d/s Water of Bhubaneswari OCP
before joining Brahmani River

Project/OCP	Bhubaneswari OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangarujhor Stream near Khaisa Pala Village as d/s Water of Bhubaneswari OCP before joining Brahmani River	
Date of sampling	30/01/2018	
pH	7.87	6.5-8.5
Dissolved Oxygen(mg/L)	6.7	4
BOD (3 days 27 °C (mg/L)	1.6	3
Color (Hazen unit)	11	300
Total dissolved solids (mg/L)	876	1500
TSS(mg/L)	8	-
Total Hardness(mg/L)	468	-
Copper(mg/L)	<0.03	1.5
Iron(mg/L)	<0.06	50
Chlorides(mg/L)	42	600
Sulphate(mg/L)	327	400
Nitrate(mg/L)	2.61	50
Fluoride(mg/L)	0.8	1.5
Phenolics (mg/L)		0.005
Cadmium(mg/L)	<0.0005	0.01
Selenium(mg/L)	<0.002	0.05
Arsenic(mg/L)	<0.002	0.2
Lead(mg/L)	<0.005	0.1
Zinc(mg/L)	0.02	15
Hexavalent Chromium(mg/L)	<0.01	0.05
Oil & Grease	10.6	0.1

Table: 169
Surface Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Pond Water of Madanmohanpur

Project/OCP	Bhubaneswari OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
	Pond water of Madanmohanpur				
Name of Station	27.04.17	14/07/2017	13/10/2017	30/01/2018	
Date of sampling	27.04.17	14/07/2017	13/10/2017	30/01/2018	
pH	7.77	7.46	7.93	7.77	6.5-8.5
Dissolved Oxygen(mg/L)	4.6	5.4	4.4	6.6	4
BOD (3 days 27°C (mg/L)	3.4	3.6	3.6	1.2	3
Color (Hazen unit)	2	4	2	32	300
Total dissolved solids (mg/L)	478	848	182	510	1500
TSS(mg/L)	36	18	16	12	-
Total Hardness(mg/L)	72	60	76	116	-
Copper(mg/L)	0.04	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	2.12	<0.06	0.35	50
Chlorides(mg/L)	290	248	32	112	600
Sulphate(mg/L)	26	48	32	53	400
Nitrate(mg/L)	5.76	16.47	3.99	5.73	50
Fluoride(mg/L)	0.79	0.44	1.04	1.15	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.005	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	<0.02	0.04	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	20.2	0.1

Table: 170
Surface Water Quality Data
Area: Bharatpur
Project: Bharatpur OCP

Monitoring Station: Bangarujhor River near Solada Village as u/s Water of Bharatpur OCP

Project/OCP	Bharatpur OCP		IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangarujhor River near Solada Village as u/s Water of Bharatpur OCP		
Date of sampling	26.04.17	13/10/2017	
pH	7.28	7.97	6.5-8.5
Dissolved Oxygen(mg/L)	4.8	4.6	4
BOD (3 days 27 °C (mg/L)		3.7	3
Color (Hazen unit)	4	5	300
Total dissolved solids (mg/L)	874	418	1500
TSS(mg/L)	12	20	-
Total Hardness(mg/L)	496	264	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	50
Chlorides(mg/L)	42	26	600
Sulphate(mg/L)	230	140	400
Nitrate(mg/L)	7.08	6.78	50
Fluoride(mg/L)	0.63	1.02	1.5
Phenolics (mg/L)			0.005
Cadmium(mg/L)	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.03	0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.02	0.05
Oil & Grease	<4.0	<4.0	0.1

Table: 171
Surface Water Quality Data
Area: Bharatpur
Project: Bharatpur OCP

Monitoring Station: Bangarujhor River near Telepasi Village as u/s Water of Bharatpur OCP

Project/OCP	Bharatpur OCP		IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangarujhor River near Telepaso Village as u/s Water of Bharatpur OCP		
Date of sampling	14/07/2017	30/01/2018	
pH	7.09	8.12	6.5-8.5
Dissolved Oxygen(mg/L)	6.5	7.3	4
BOD (3 days 27 °C (mg/L)	3.8	1.2	3
Color (Hazen unit)	4	9	300
Total dissolved solids (mg/L)	476	720	1500
TSS(mg/L)	36	8	-
Total Hardness(mg/L)	220	424	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	50
Chlorides(mg/L)	26	38	600
Sulphate(mg/L)	188	201	400
Nitrate(mg/L)	5.87	3.53	50
Fluoride(mg/L)	0.32	0.75	1.5
Phenolics (mg/L)	<0.001		0.005
Cadmium(mg/L)	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	0.05
Arsenic(mg/L)	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	<0.02	0.2	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	0.05
Oil & Grease	<4.0	8.2	0.1

Table: 172
Surface Water Quality Data
Area: Bharatpur
Project: Ananta OCP

Monitoring Station: Bangarujhor River near Banapalli as u/s Water of Point of Confluence of Ananta OCP

Project/OCP	Ananta OCP		IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangarujhor River near Banapalli as u/s Water of Point of Confluence of Ananta OCP		
Date of sampling	26.04.17	13/10/2017	
pH	7.4	8.05	6.5-8.5
Dissolved Oxygen(mg/L)	5.1	4.8	4
BOD (3 days 27 °C)(mg/L)	4.2	3.4	3
Color (Hazen unit)	2	4	300
Total dissolved solids (mg/L)	1088	384	1500
TSS(mg/L)	28	24	-
Total Hardness(mg/L)	716	240	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	50
Chlorides(mg/L)	64	24	600
Sulphate(mg/L)	248	60	400
Nitrate(mg/L)	6.47	4.76	50
Fluoride(mg/L)	0.55	1.18	1.5
Phenolics (mg/L)			0.005
Cadmium(mg/L)	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.02	0.05
Oil & Grease	<4.0	<4.0	0.1

Table: 173
Surface Water Quality Data
Area: Bharatpur
Project: Ananta OCP

Monitoring Station: Bangarujhor River near Joragarhia as u/s Water of Point of Confluence of Ananta OCP

Project/OCP	Ananta		IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangaru jhor river near Joragarhia as u/s Water of Point of confluence of Ananta OCP		
Date of sampling	14/07/2017	30/01/2018	
pH	7.33	7.73	6.5-8.5
Dissolved Oxygen(mg/L)	5.8	7.5	4
BOD (3 days 27°c)(mg/L)	4	2.1	3
Color (Hazen unit)	2	6	300
Total dissolved solids (mg/L)	176	824	1500
TSS(mg/L)	18	8	-
Total Hardness(mg/L)	116	468	-
Copper(mg/L)	<0.03	<0.03	1.5
Iron(mg/L)	0.11	<0.06	50
Chlorides(mg/L)	18	42	600
Sulphate(mg/L)	24	293	400
Nitrate(mg/L)	2.76	4.42	50
Fluoride(mg/L)	0.32	0.83	1.5
Phenolics (mg/L)	<0.001		0.005
Cadmium(mg/L)	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	0.05
Arsenic(mg/L)	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	0.1
Zinc(mg/L)	<0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	0.05
Oil & Grease	<4.0	8.2	0.1

Table: 174
Surface Water Quality Data
Area: Bharatpur
Project: Ananta OCP

Monitoring Station: Bangarujhor River near Raghunathpur Village as d/s Water of Ananta OCP

Project/OCP	Ananta OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Bangarujhor River near Raghunathpur Village as d/s Water of Ananta OCP				
Date of sampling	26.04.17	14/07/2017	13/10/2017	30/01/2018	
pH	Dry	7.22	7.78	Dry	6.5-8.5
Dissolved Oxygen(mg/L)	Dry	5.7	5.2	Dry	4
BOD (3 days 27°c)(mg/L)	Dry	3.8	3.8	Dry	3
Color (Hazen unit)	Dry	4	4	Dry	300
Total dissolved solids (mg/L)	Dry	388	330	Dry	1500
TSS(mg/L)	Dry	32	22	Dry	-
Total Hardness(mg/L)	Dry	198	204	Dry	-
Copper(mg/L)	Dry	<0.03	<0.03	Dry	1.5
Iron(mg/L)	Dry	<0.06	<0.06	Dry	50
Chlorides(mg/L)	Dry	22	20	Dry	600
Sulphate(mg/L)	Dry	140	72	Dry	400
Nitrate(mg/L)	Dry	4.76	5.47	Dry	50
Fluoride(mg/L)	Dry	0.37	1.16	Dry	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	Dry	<0.0005	<0.0005	Dry	0.01
Selenium(mg/L)	Dry	<0.002	<0.002	Dry	0.05
Arsenic(mg/L)	Dry	0.003	0.003	Dry	0.2
Lead(mg/L)	Dry	<0.005	<0.005	Dry	0.1
Zinc(mg/L)	Dry	<0.02	<0.02	Dry	15
Hexavalent Chromium(mg/L)	Dry	<0.01	<0.02	Dry	0.05
Oil & Grease	Dry	<4.0	<4.0	Dry	0.1

Table: 175
Surface Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Village Pond near Deulbera Siding

Project/OCP	Lingraj OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Village Pond near Deulbera Siding				
Date of sampling	27.04.17	15/07/2017	13/10/2017	30/01/2018	
pH	7.41	7.13	7.47	7.97	6.5-8.5
Dissolved Oxygen(mg/L)	4.8	6.2	4.8	5.9	4
BOD (3 days 27°c)(mg/L)	3.2	4.1	3.2	1.4	3
Color (Hazen unit)	2	4	2	35	300
Total dissolved solids (mg/L)	760	320	412	348	1500
TSS(mg/L)	16	16	16	16	-
Total Hardness(mg/L)	420	152	208	184	-
Copper(mg/L)	0.03	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	0.18	<0.06	<0.06	0.22	50
Chlorides(mg/L)	56	28	26	26	600
Sulphate(mg/L)	188	102	136	59	400
Nitrate(mg/L)	6.76	5.47	5.76	1.97	50
Fluoride(mg/L)	0.47	0.56	0.81	0.5	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	0.05	0.06	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	20.6	0.1

Table: 176
Surface Water Quality Data
Area: Kaniha
Project: Kaniha OCP

Monitoring Station: Singada jhor Stream nearer to Village Bhagirathipur as u/s Water for Kaniha OCP

Project/OCP	Kaniha OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Singada jhor Stream nearer to Village Bhagirathipur as u/s Water for Kaniha OCP	
Date of sampling	26.04.17	
pH	7.65	6.5-8.5
Dissolved Oxygen(mg/L)	5.1	4
BOD (3 days 27°c(mg/L)	3.6	3
Color (Hazen unit)	2	300
Total dissolved solids (mg/L)	194	1500
TSS(mg/L)	24	-
Total Hardness(mg/L)	84	-
Copper(mg/L)	<0.03	1.5
Iron(mg/L)	<0.06	50
Chlorides(mg/L)	22	600
Sulphate(mg/L)	12	400
Nitrate(mg/L)	3.47	50
Fluoride(mg/L)	0.63	1.5
Phenolics (mg/L)		0.005
Cadmium(mg/L)	<0.0005	0.01
Selenium(mg/L)	<0.002	0.05
Arsenic(mg/L)	<0.002	0.2
Lead(mg/L)	<0.005	0.1
Zinc(mg/L)	0.03	15
Hexavalent Chromium(mg/L)	<0.01	0.05
Oil & Grease	<4.0	0.1

Table: 177
Surface Water Quality Data
Area: Kaniha
Project: Kaniha OCP

Monitoring Station: Singadajhor Stream nearer to Village Khairnali as u/s Water for Kaniha OCP

Project/OCP	Kaniha OCP			IS:2296-1982 Tolerance for inland Surface water (Class C)
	Singada jhor Stream nearer to Village Khairnali as u/s Water for Kaniha OCP			
Date of sampling	07/07/2017	12/10/2017	29/01/2018	
pH	7.15	7.97	8.10	6.5-8.5
Dissolved Oxygen(mg/L)	6.4	4.7	6.7	4
BOD (3 days 27°c)(mg/L)	3.2	3.0	1.3	3
Color (Hazen unit)	2	3	15	300
Total dissolved solids (mg/L)	184	230	220	1500
TSS(mg/L)	28	18	8	-
Total Hardness(mg/L)	108	168	116	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	0.18	<0.06	<0.06	50
Chlorides(mg/L)	18	16	18	600
Sulphate(mg/L)	30	21	38	400
Nitrate(mg/L)	4.43	4.78	1.51	50
Fluoride(mg/L)	0.53	0.74	1.46	1.5
Phenolics (mg/L)	<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	0.004	0.003	0.005	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.02	<0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	14.4	0.1

Table: 178
Surface Water Quality Data
Area: Kaniha
Project: Kaniha OCP

Monitoring Station: Before Junction Point of Singadajhor & Brahmani River at Balangi Village as d/s for Kaniha OCP

Project/OCP	Kaniha OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
	Before Junction Point of Singadajhor & Brahmani River at Balangi Village as d/s for Kaniha OCP				
Date of sampling	26.04.17	07/07/2017	12/10/2017	29/01/2018	
pH	7.23	7.07	8.18	8.02	6.5-8.5
Dissolved Oxygen(mg/L)	4.9	5.8	4.8	7.9	4
BOD (3 days 27°c)(mg/L)	3.2	3.4	4.2	2.2	3
Color (Hazen unit)	2	2	2	20	300
Total dissolved solids (mg/L)	202	180	232	280	1500
TSS(mg/L)	18	22	20	12	-
Total Hardness(mg/L)	84	104	164	152	-
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	0.12	<0.06	0.2	50
Chlorides(mg/L)	26	20	20	22	600
Sulphate(mg/L)	13	32	18	41	400
Nitrate(mg/L)	3.99	3.99	4.43	1.73	50
Fluoride(mg/L)	0.78	0.29	0.64	1.41	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.003	0.006	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.12	<0.02	0.02	0.09	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	9.4	0.1

Table: 179
Surface Water Quality Data
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Tikra Nadi near Kaniah Village as u/s Water for Kaniah OCP

Project/OCP	Kaniha OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
	Tikra Nadi near Kaniah Village as u/s Water for Kaniah OCP				
Date of sampling	26.04.17	07/07/2017	12/10/2017	29/01/2018	
pH	7.01	7.16	7.80	7.81	6.5-8.5
Dissolved Oxygen(mg/L)	4.3	5.7	4.0	7.7	4
BOD (3 days 27°c)(mg/L)	2.9	4.0	3.2	1.7	3
Color (Hazen unit)	4	3	8	14	300
Total dissolved solids (mg/L)	468	1.36	194	274	1500
TSS(mg/L)	12	48	28	20	-
Total Hardness(mg/L)	216	60	100	192	-
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	3.12	<0.06	0.1	50
Chlorides(mg/L)	30	14	14	20	600
Sulphate(mg/L)	104	40	22	24	400
Nitrate(mg/L)	5.76	3.76	5.37	1.89	50
Fluoride(mg/L)	0.81	0.4	1.03	0.43	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	0.019	0.004	0.01	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	<0.02	0.09	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	17.2	0.1

Table: 180
Surface Water Quality Data
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Tikra nadi near Kaniha village as u/s water for Kaniha OCP

Project/OCP	Kaniha OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Tikra nadi near Shagarhi Pala village as d/s water for Kaniha OCP				
Date of sampling	26.04.17	07/07/2017	12/10/2017	29/01/2018	
pH	7.12	7.18	7.76	7.60	6.5-8.5
Dissolved Oxygen(mg/L)	5.1	6.3	4.8	6.4	4
BOD (3 days 27°c(mg/L)	3.5	3.4	3.8	1.5	3
Color (Hazen unit)	6	4	7	9	300
Total dissolved solids (mg/L)	444	114	202	254	1500
TSS(mg/L)	10	52	34	8	-
Total Hardness(mg/L)	204	56	108	176	-
Copper(mg/L)	<0.03	<0.003	<0.003	<0.003	1.5
Iron(mg/L)	<0.06	2.30	<0.06	<0.06	50
Chlorides(mg/L)	44	14	16	20	600
Sulphate(mg/L)	114	28	21	12	400
Nitrate(mg/L)	5.37	1.97	5.87	1.45	50
Fluoride(mg/L)	0.63	0.55	1.08	0.42	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	0.017	0.004	0.004	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	<0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	18.8	0.1

Table: 181
Surface Water Quality Data
Area: Hingula
Project: Hingula OCP
Monitoring Station: Singadhajhor Stream nearer HOCP

Project/OCP	Hingula OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
	Singadhajhor Stream nearer HOCP				
Date of sampling	26.04.17	07/07/2017	12/10/2017	29/01/2018	
pH	7.2	7.07	8.02	7.90	6.5-8.5
Dissolved Oxygen(mg/L)	4.8	6.3	5.2	5.5	4
BOD (3 days 27°C)(mg/L)	3.4	3.6	4.6	1.3	3
Color (Hazen unit)	2	5	5	5	300
Total dissolved solids (mg/L)	728	178	238	408	1500
TSS(mg/L)	16	38	18	14	-
Total Hardness(mg/L)	384	116	164	236	-
Copper(mg/L)	<0.03	0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	0.19	<0.06	<0.06	50
Chlorides(mg/L)	38	16	14	28	600
Sulphate(mg/L)	178	26	14	108	400
Nitrate(mg/L)	6.76	3.47	4.43	1.08	50
Fluoride(mg/L)	0.58	0.28	0.84	0.62	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	0.0006	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.004	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	0.015	<0.005	0.1
Zinc(mg/L)	0.03	<0.02	<0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	7.4	0.1

Table: 182
Surface Water Quality Data
Area: Hingula
Project: Hingula OCP
Monitoring Station: Pond Water of Kankarei Village

Project/OCP	Hingula OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Pond water of Kankarei Village				
Date of sampling	26.04.17	07/07/2017	12/10/2017	29/01/2018	
pH	7.24	7.09	7.54	7.57	6.5-8.5
Dissolved Oxygen(mg/L)	4.8	5.2	5.6	5.6	4
BOD (3 days 27°C)(mg/L)	3.6	3.8	3.7	1.4	3
Color (Hazen unit)	8	4	2	24	300
Total dissolved solids (mg/L)	328	128	402	216	1500
TSS(mg/L)	38	28	16	16	-
Total Hardness(mg/L)	132	64	140	128	-
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	0.16	<0.06	<0.06	50
Chlorides(mg/L)	46	18	72	26	600
Sulphate(mg/L)	45	22	96	14	400
Nitrate(mg/L)	5.76	2.47	6.47	3.20	50
Fluoride(mg/L)	0.8	0.23	0.89	0.76	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.03	<0.02	0.07	0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	22.4	0.1

Table: 183
Surface Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Derjenga Reservoir as a Part of Impact Study

Project/OCP	Balram OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Derjenga Reservoir as a Part of Impact Study				
Date of sampling	20.04.17	07/07/2017	13/10/2017	27/01/2018	
pH	7.41	6.92	7.76	7.94	6.5-8.5
Dissolved Oxygen(mg/L)	5.3	6.0	5.8	6.3	4
BOD (3 days 27°C)(mg/L)	2.9	4.2	3.4	2.0	3
Color (Hazen unit)	4	4	2	22	300
Total dissolved solids (mg/L)	174	310	240	244	1500
TSS(mg/L)	10	14	18	18	-
Total Hardness(mg/L)	60	132	140	132	-
Copper(mg/L)	0.04	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	50
Chlorides(mg/L)	26	38	18	14	600
Sulphate(mg/L)	10	68	44	11	400
Nitrate(mg/L)	4.43	5.87	4.76	3.72	50
Fluoride(mg/L)	0.83	0.49	0.67	0.68	1.5
Phenolics (mg/L)	<0.0005	<0.001			0.005
Cadmium(mg/L)	<0.002	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)		0.003	0.004	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.02	0.09	<0.02	0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	16.4	0.1

Table: 184
Surface Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Pond Water of Ambapal Village

Project/OCP	Balram OCP				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Pond Water of Ambapal Village				
Date of sampling	20.04.17	07/07/2017	13/10/2017	30/01/2018	
pH	7.26	7.08	8.05	7.92	6.5-8.5
Dissolved Oxygen(mg/L)	4.8	5.4	4.7	7.1	4
BOD (3 days 27°c)(mg/L)	3.3	3.8	3.8	1.4	3
Color (Hazen unit)	2	2	3	14	300
Total dissolved solids (mg/L)	214	384	260	190	1500
TSS(mg/L)	28	32	22	10	-
Total Hardness(mg/L)	56	136	168	96	-
Copper(mg/L)	0.04	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	0.34	<0.06	0.1	50
Chlorides(mg/L)	68	68	18	16	600
Sulphate(mg/L)	13	60	14	23	400
Nitrate(mg/L)	4.76	7.43	5.47	4.57	50
Fluoride(mg/L)	0.49	0.45	0.61	0.48	1.5
Phenolics (mg/L)	<0.0005	<0.001			0.005
Cadmium(mg/L)	<0.002	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)		<0.002	0.004	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.03	<0.02	<0.02	0.09	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	18.6	0.1

Table:185
Surface Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Pond water of Dera Village

Project/OCP	Talcher				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Pond water of Dera Village				
Date of sampling	27.04.17	15/07/2017	13/10/2017	30/01/2018	
pH	7.06	6.54	7.1	7.56	6.5-8.5
Dissolved Oxygen(mg/L)	4.6	6.2	5.1	5.8	4
BOD (3 days 27°c)(mg/L)	3.1	3.2	4.0	1.9	3
Color (Hazen unit)	2	4	2	12	300
Total dissolved solids (mg/L)	448	316	410	292	1500
TSS(mg/L)	22	42	12	12	-
Total Hardness(mg/L)	168	152	156	132	-
Copper(mg/L)	0.09	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	50
Chlorides(mg/L)	82	50	65	34	600
Sulphate(mg/L)	102	60	60	58	400
Nitrate(mg/L)	5.76	4.76	9.76	1.43	50
Fluoride(mg/L)	0.85	0.57	0.49	0.6	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	0.003	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.03	<0.02	0.002	0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	18.4	0.1

Table:186
Surface Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Nandira Jhor near Karnapur Village as u/s of Nandira U/G Mine

Project/OCP	Nandira			IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Nandira Jhor near Karnapur Village as u/s of Nandira U/G mine			
Date of sampling	27.04.17	15/07/2017	13/10/2017	
pH	7.58	6.97	8.02	6.5-8.5
Dissolved Oxygen(mg/L)	5.4	6.5	4.7	4
BOD (3 days 27°C(mg/L)	4.6	4.0	3.6	3
Color (Hazen unit)	4	5	2	300
Total dissolved solids (mg/L)	368	278	326	1500
TSS(mg/L)	14	18	16	-
Total Hardness(mg/L)	168	156	204	-
Copper(mg/L)	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	<0.06	50
Chlorides(mg/L)	54	32	32	600
Sulphate(mg/L)	64	50	37	400
Nitrate(mg/L)	5.37	4.87	5.76	50
Fluoride(mg/L)	0.49	0.53	1.10	1.5
Phenolics (mg/L)		<0.001		0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	0.019	<0.002	0.003	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	0.05
Oil & Grease	<4.0	<4.0	<4.0	0.1

Table: 187
Surface Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Nandira Jhor near Karnapur Village as u/s of Nandira U/G Mine

Project/OCP	Nandira	IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Nandira Jhor near Sakasingha village as u/s of Nandira U/G mine	
Date of sampling	29/01/2018	
pH	8.48	6.5-8.5
Dissolved Oxygen(mg/L)	6.1	4
BOD (3 days 27°c)(mg/L)	1.5	3
Color (Hazen unit)	10	300
Total dissolved solids (mg/L)	358	1500
TSS(mg/L)	14	-
Total Hardness(mg/L)	196	-
Copper(mg/L)	<0.03	1.5
Iron(mg/L)	<0.06	50
Chlorides(mg/L)	38	600
Sulphate(mg/L)	60	400
Nitrate(mg/L)	3.18	50
Fluoride(mg/L)	1.44	1.5
Phenolics (mg/L)		0.005
Cadmium(mg/L)	<0.0005	0.01
Selenium(mg/L)	<0.002	0.05
Arsenic(mg/L)	<0.002	0.2
Lead(mg/L)	<0.005	0.1
Zinc(mg/L)	0.02	15
Hexavalent Chromium(mg/L)	<0.01	0.05
Oil & Grease	21.2	0.1

Table: 188
Surface Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Nandira Jhor near Tentolei/Pengua Village as d/s of Nandira U/G Mine

Project/OCP	Nandira				IS:2296-1982 Tolerance for inland Surface water (Class C)
	Nandira Jhor near Tentolei/Pengua Village as d/s of Nandira U/G mine				
Date of sampling	27.04.17	15/07/2017	13/10/2017	29/01/2018	
pH	8.12	6.70	7.98	8.50	6.5-8.5
Dissolved Oxygen(mg/L)	5.1	5.9	4.8	6.6	4
BOD (3 days 27°c(mg/L)	2.2	3.8	3.9	1.4	3
Color (Hazen unit)	2	4	3	8	300
Total dissolved solids (mg/L)	358	286	334	346	1500
TSS(mg/L)	18	22	18	16	-
Total Hardness(mg/L)	168	160	204	176	-
Copper(mg/L)	0.09	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	50
Chlorides(mg/L)	56	30	32	38	600
Sulphate(mg/L)	62	52	40	61	400
Nitrate(mg/L)	5.76	4.43	6.07	3.30	50
Fluoride(mg/L)	0.46	0.32	1.04	1.45	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.05
Arsenic(mg/L)	<0.002	<0.002	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.02	<0.02	0.02	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	13.8	0.1

Table: 189
Surface Water Quality Data
Area: Talcher
Project: Deulberas Colliery
Monitoring Station: Pond Water of Gopinathpur Village

Project/OCP	Deulbera				IS:2296-1982 Tolerance for inland Surface water (Class C)
Name of Station	Pond Water of Gopinathpur Village				
Date of sampling	27.04.17	15/07/2017	13/10/2017	29/01/2018	
pH	7.82	6.80	7.50	7.74	6.5-8.5
Dissolved Oxygen(mg/L)	5.1	5.8	5.8	5.0	4
BOD (3 days 27°C)(mg/L)	3.8	3.6	4.1	1.2	3
Color (Hazen unit)	6	5	4	16	300
Total dissolved solids (mg/L)	448	164	428	418	1500
TSS(mg/L)	24	34	24	8	-
Total Hardness(mg/L)	72	60	120	144	-
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	1.5
Iron(mg/L)	0.2	0.47	0.07	0.19	50
Chlorides(mg/L)	270	26	84	76	600
Sulphate(mg/L)	24	30	110	98	400
Nitrate(mg/L)	4.87	3.78	8.76	4.53	50
Fluoride(mg/L)	0.89	0.61	0.88	0.96	1.5
Phenolics (mg/L)		<0.001			0.005
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.01
Selenium(mg/L)	<0.002	<0.002	<0.002		0.05
Arsenic(mg/L)	<0.002	<0.002	0.003	<0.002	0.2
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.03	<0.02	0.02	0.06	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.02	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	16	0.1

TABLES FOR WELL WATER LEVEL DATA

Table: 190
Well Water Level
Project: Ananta OCP
Monitoring Station: Dera Village Well

Date of sampling	Water level (depth from ground level in meters)
10/05/2017	3.4
12/08/2017	3.09
27/11/2017	2.79
22/01/2018	1.89

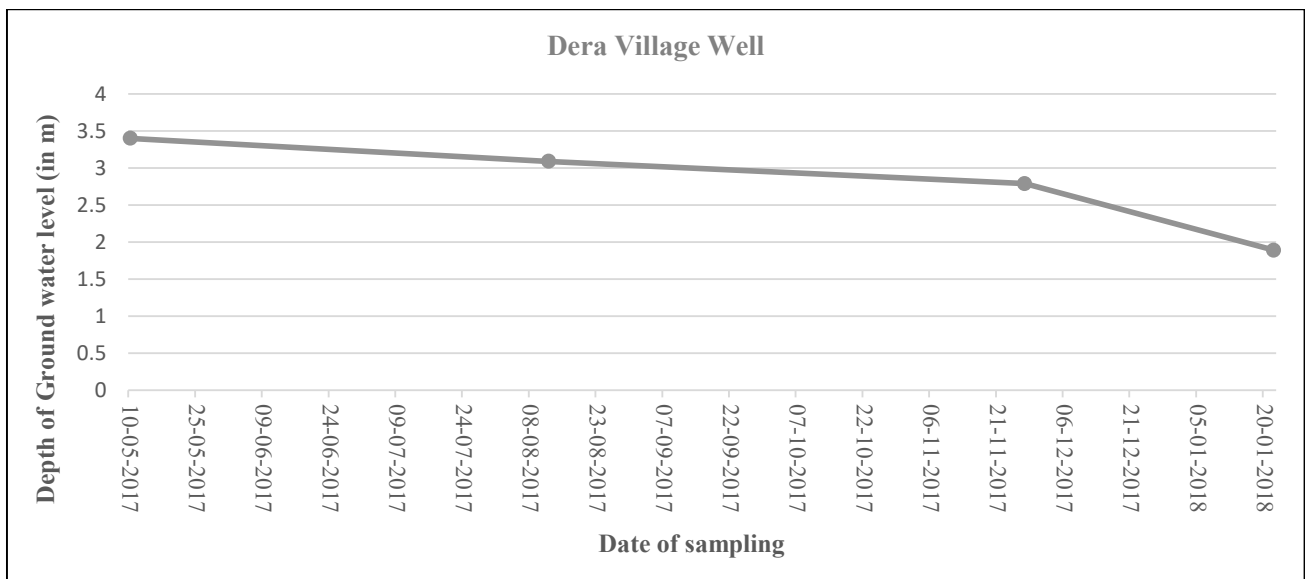


Table: 191
Well Water Level
Project: Ananta OCP
Monitoring Station: Hensmul Village Well

Date of sampling	Water level (depth from ground level in meters)
10/05/2017	5.525
12/08/2017	3.31
27/11/2017	2.43
22/01/2018	2.04

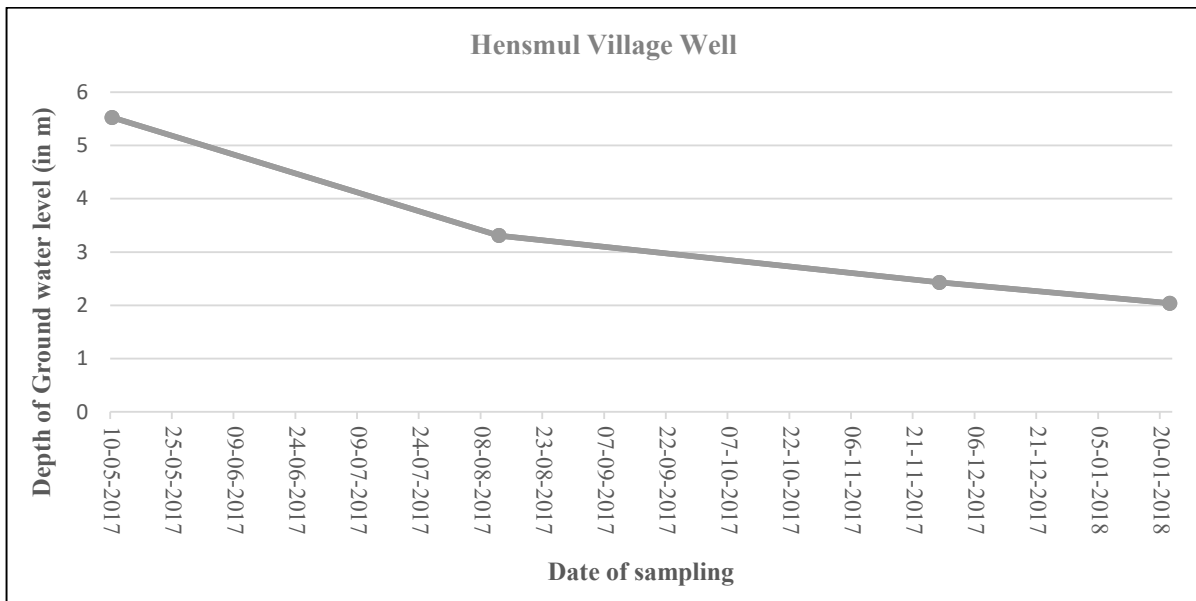


Table: 192
Well Water Level
Project: Hingula OCP
Monitoring Station: Gopal Prasad Village Well

Date of sampling	Water level (depth from ground level in meters)
08/05/2017	3.45
10/08/2017	3.98
17/11/2017	3.33
24/01/2018	2.07

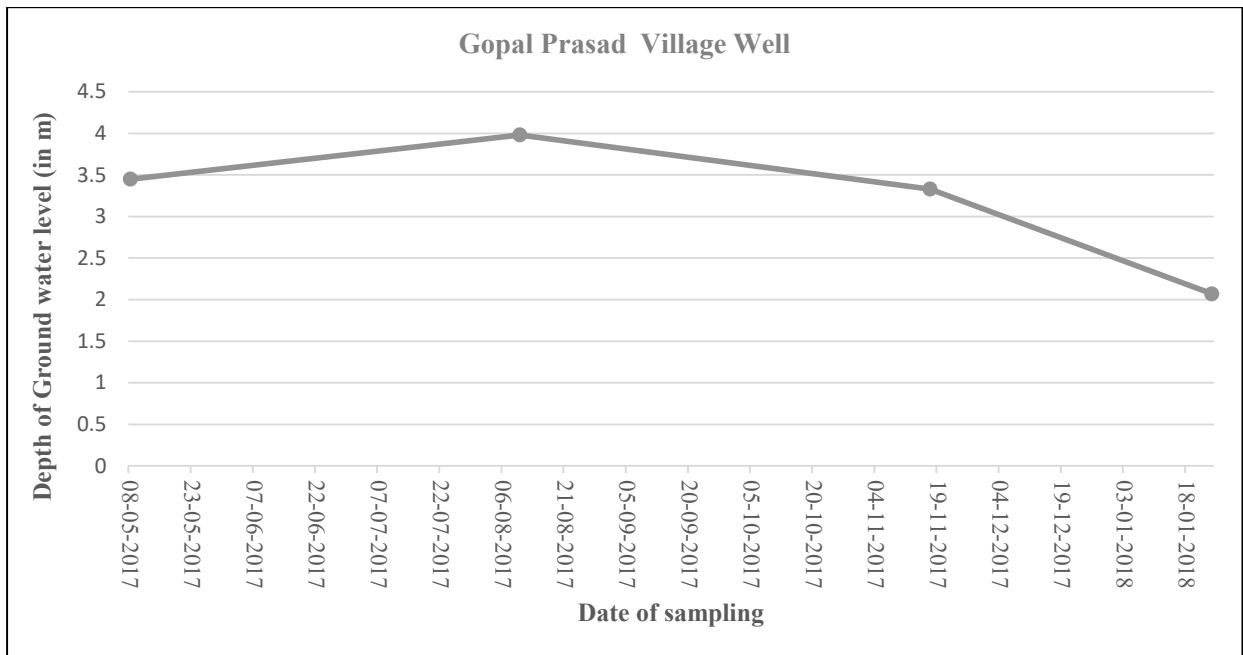


Table: 193
Well Water Level
Project: Hingula OCP
Monitoring Station: Kusumpal Village Well

Date of sampling	Water level (depth from ground level in meters)
11/05/2017	3.2
10/08/2017	3.47
17/11/2017	2.47
24/01/2018	2.85

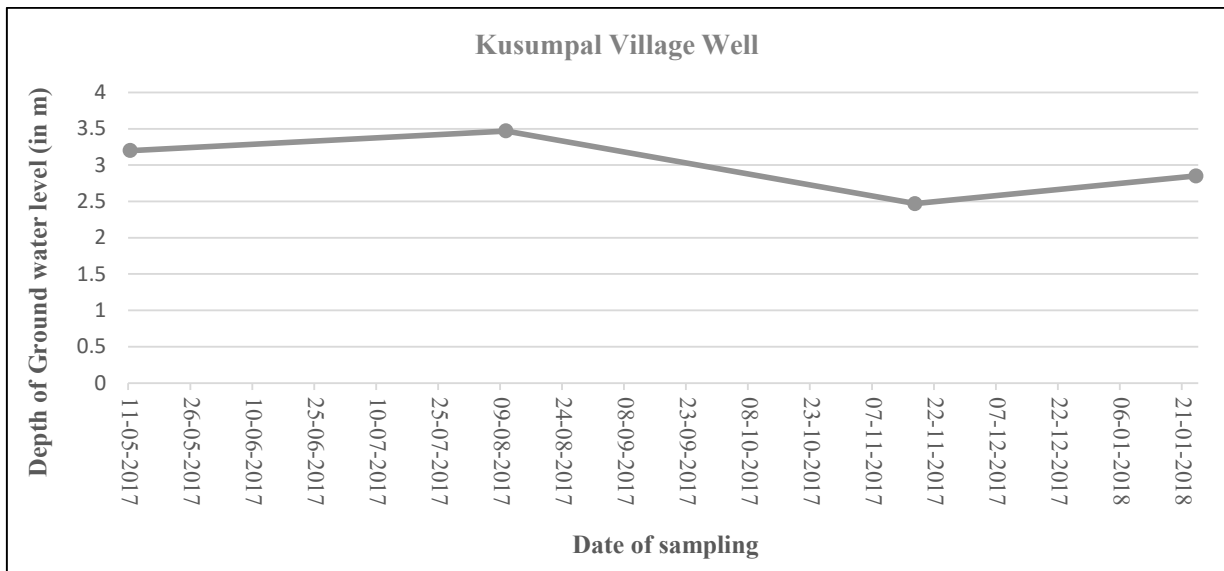


Table: 194
Well Water Level
Project: Balaram OCP
Monitoring Station: Danara Village Well

Date of sampling	Water level (depth from ground level in meters)
11/05/2017	4.4
10/08/2017	2.85
22/11/2017	3.33
24/01/2018	2.43

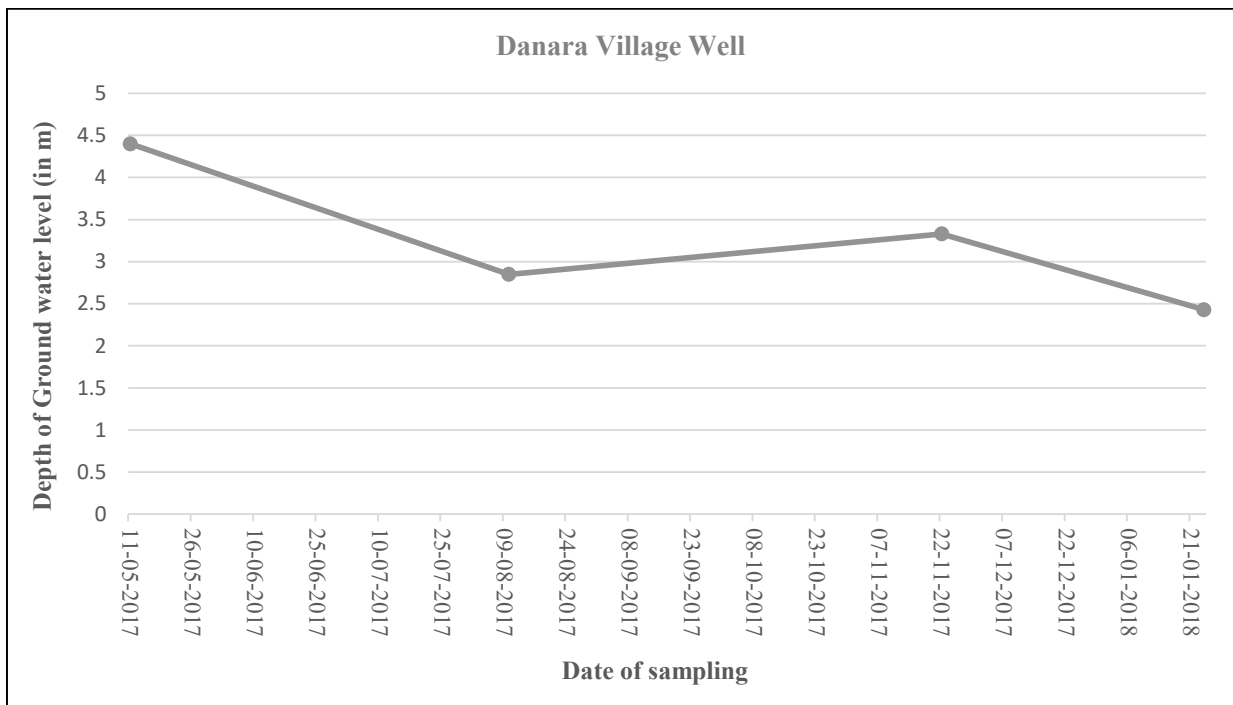


Table: 195
Well Water Level
Project: Balaram OCP
Monitoring Station: Nakeipasi Village Well

Date of sampling	Water level (depth from ground level in meters)
04/05/2017	3.675
10/08/2017	2.53
22/11/2017	2.12
24/01/2018	2.76

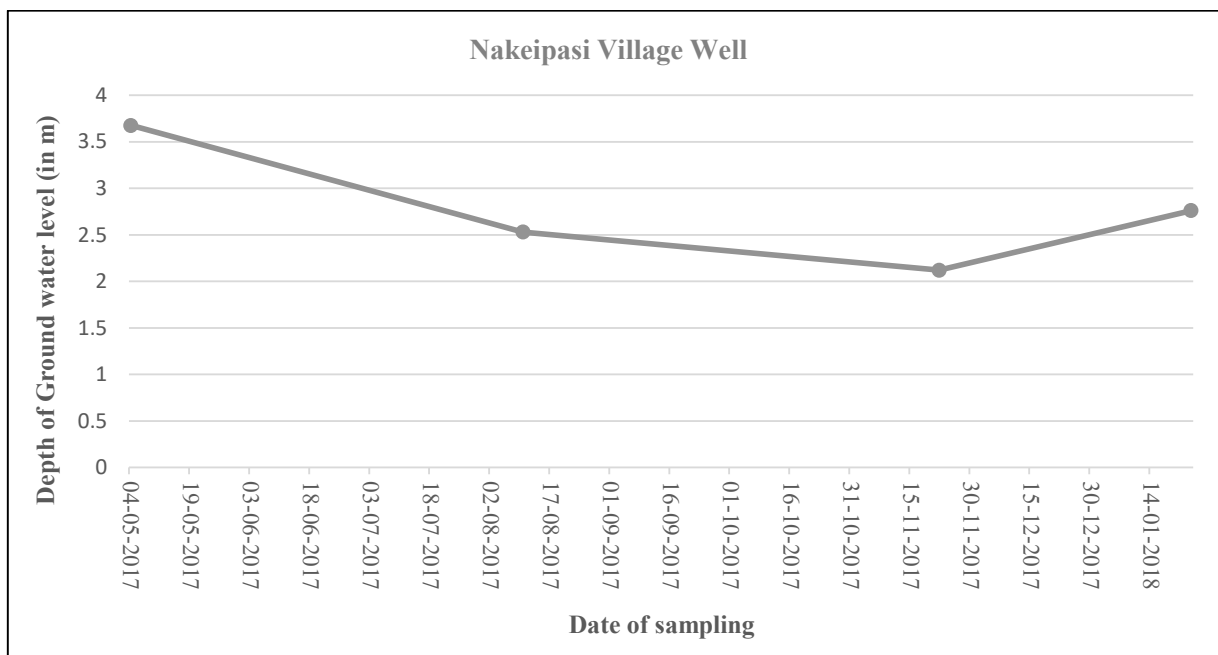


Table: 196
Well Water Level
Project: Lingraj OCP
Monitoring Station: Balunga Khamar Village Well

Date of sampling	Water level (depth from ground level in meters)
10/05/2017	5.2
12/08/2017	2.84
18/11/2017	2.73
20/01/2018	2.16

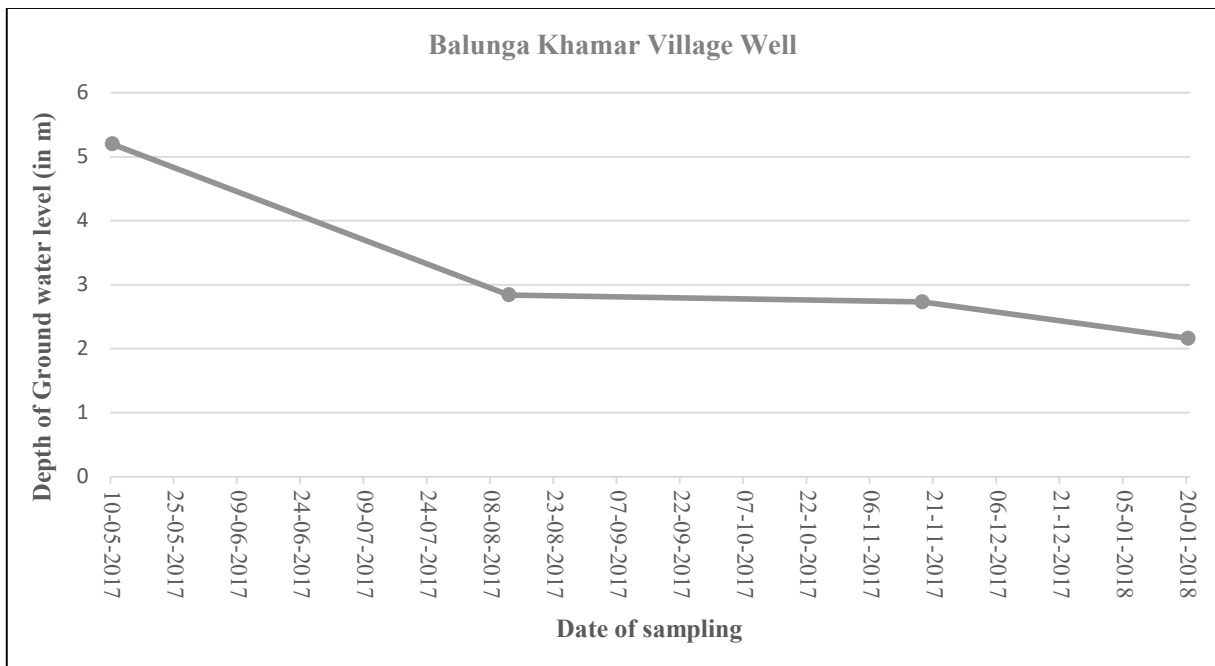


Table: 197
Well Water Level
Project: Lingraj OCP
Monitoring Station: Naraharipur Village Well

Date of sampling	Water level (depth from ground level in meters)
10/05/2017	5.825
12/08/2017	3.65
25/11/2017	4.11
22/01/2018	2.76

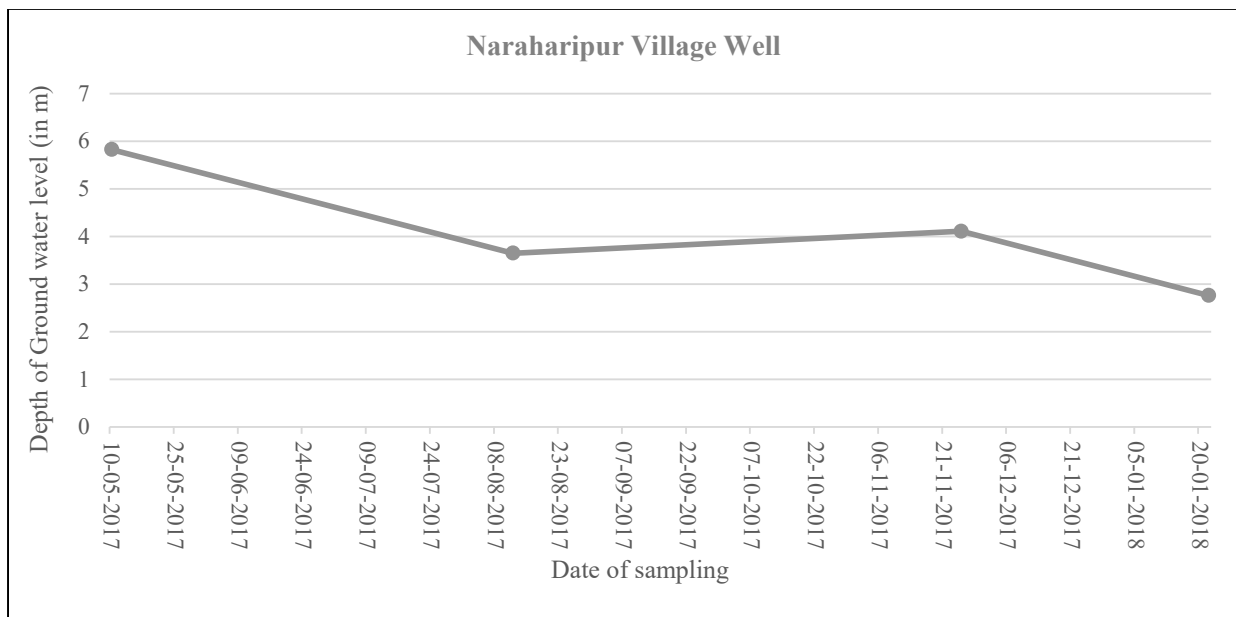


Table: 198
Well Water Level
Project: Lingraj OCP
Monitoring Station: Deulbera Village Well

Date of sampling	Water level (depth from ground level in meters)
08/05/2017	4.85
12/08/2017	2.67
29/11/2017	4.82
29/01/2018	2.16

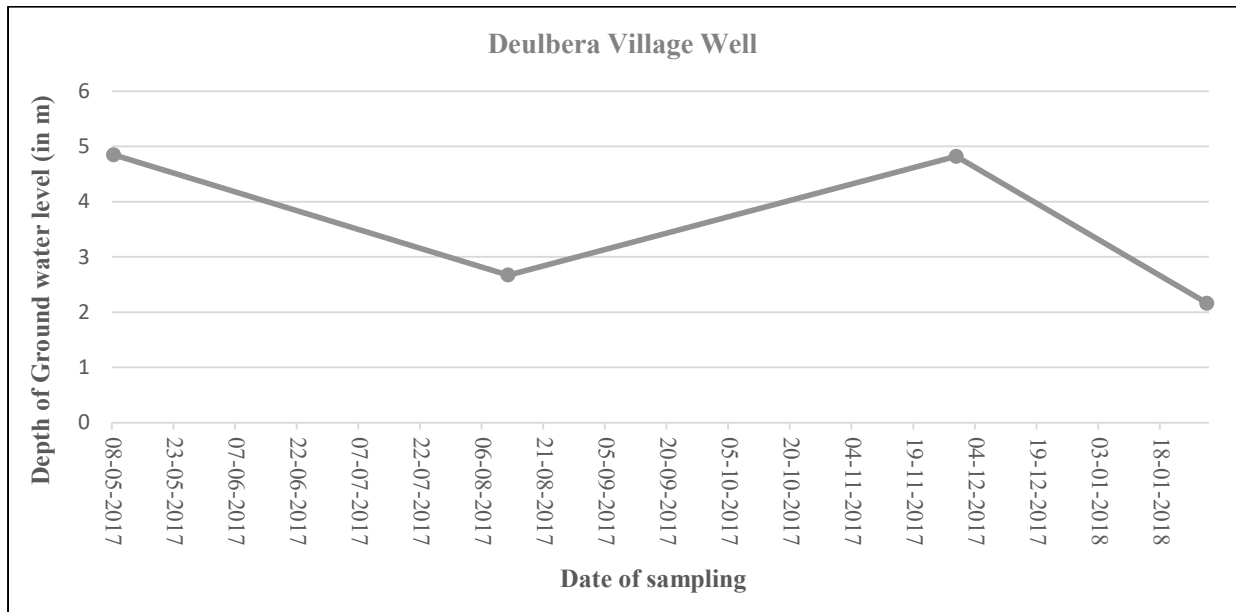
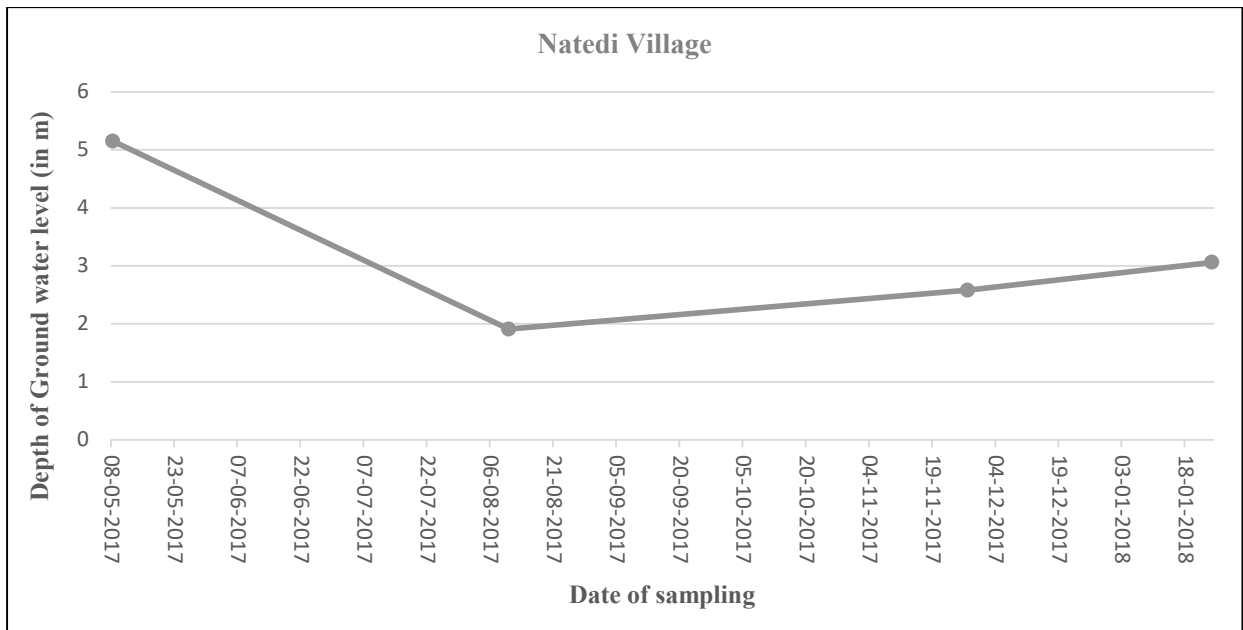


Table: 199
Well Water Level
Project: Lingraj OCP
Monitoring Station: Natedi Village Well

Date of sampling	Water level(depth from ground level in meters)
08/05/2017	5.15
10/08/2017	1.91
27/11/2017	2.58
24/01/2018	3.06



TABLES FOR DRINKING WATER QUALITY DATA

Table: 200
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Rakas Vill. Well Water (Yearly)

Project / OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Rakas Vill. Well Water		
Dt. of sampling	26.04.2017	Acceptable	Permissible
Colour(Hazen)	2	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	5
pH	7.34	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	200	600
Total Hardness(mg/L)	372	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	154	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	796	500	2000
Calcium(mg/L)	112	75	200
Copper(mg/L)	0.04	0.05	1.5
Manganese(mg/L)	0.02	0.1	0.3
Sulphate(mg/L)	196	200	400
Nitrate(mg/L)	5.87	45	No relaxation
Fluoride(mg/L)	0.52	1	1.5
Selenium(mg/L)	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	5	15
Total Chromium(mg/L)	-	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	0.5	1.0
Phenolics(mg/L)	-	0.001	0.002
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 201
Drinking Water Quality Data
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Balanda Colony Tap Water (Quarterly)

Project / OCP	Jagannath OCP			Indian Drinking Standards (IS-10500):2012	
	Balanda Colony Tap Water				
Monitoring Station	14.07.2017	13-10-2017	12-01-2018	Acceptable	Permissible
Dt. of sampling	14.07.2017	13-10-2017	12-01-2018	Acceptable	Permissible
Colour(Hazen)	3	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	58	2	1	1	5
pH	7.25	7.82	7.38	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	12	56	200	600
Total Hardness(mg/L)	116	240	184	200	600
Iron(mg/L)	0.27	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	16	20	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	-	0.2	1
Total Dissolve Solid(mg/L)	260	448	372	500	2000
Calcium(mg/L)	27.2	67.2	46.4	75	200
Copper(mg/L)	0.1	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.1	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	92	164	109	200	400
Nitrate(mg/L)	4.43	4.43	2.78	45	No relaxation
Fluoride(mg/L)	0.46	1.23	0.79	1	1.5
Selenium(mg/L)	<0.002	<0.002	-	0.01	No relaxation
Arsenic(mg/L)	0.003	0.003	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.21	0.02	0.13	5	15
Total Chromium (mg/L)	0.47	<0.05	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 202
Drinking Water Quality Data
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Jagannath Colony Tap Water (Monthly)

Project / OCP	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Jagannath Colony Tap Water					
Monitoring Station						
Dt. of sampling	26.04.2017	14-05-2017	15-06-2017	14-07-2017	Acceptable	Permissible
Colour(Hazen)	2	4	6	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	2	1	10	1	5
pH	7.00	7.60	6.86	7.29	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	32	16	16	12	200	600
Total Hardness(mg/L)	112	76	196	156	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.35	0.3	No relaxation
Chloride(mg/L)	32	18	18	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	314	170	424	320	500	2000
Calcium(mg/L)	30.4	19.2	54.4	40	75	200
Copper(mg/L)	<0.03	0.03	<0.03	0.1	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	0.09	0.1	0.3
Sulphate(mg/L)	84	29	154	118	200	400
Nitrate(mg/L)	6.23	3.47	5.47	3.76	45	No relaxation
Fluoride(mg/L)	0.47	0.49	0.56	0.57	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.004	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	0.07	0.06	0.15	5	15
Total Chromium (mg/L)	-	-	<0.05	0.5	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 203
Drinking Water Quality Data
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Jagannath Colony Tap Water (Monthly)

Project / OCP	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Jagannath Colony Tap Water					
Monitoring Station						
Dt. of sampling	12-08-2017	15-09-2017	13-10-2017	14-11-2017	Acceptable	Permissible
Colour(Hazen)	2	3	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	2	1	1	5
pH	6.94	6.66	7.79	7.33	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	8	12	8	200	600
Total Hardness(mg/L)	172	164	204	144	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	14	16	22	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	-	0.2	1
Total Dissolve Solid(mg/L)	342	318	408	240	500	2000
Calcium(mg/L)	49.6	46.4	56	35.2	75	200
Copper(mg/L)	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.04	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	134	108	148	52	200	400
Nitrate(mg/L)	5.47	4.43	4.76	6.03	45	No relaxation
Fluoride(mg/L)	0.44	0.42	0.97	0.14	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.003	-	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	-	0.01	No relaxation
Zinc(mg/L)	0.14	0.04	0.11	0.04	5	15
Total Chromium (mg/L)	0.08	0.15	<0.05	0.14	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	-	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	-	0.003	No relaxation

Table: 204
Drinking Water Quality Data
Area: Jagannath
Project: Jagannath OCP
Monitoring Station: Jagannath Colony Tap Water (Monthly)

Project / OCP	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Jagannath Colony Tap Water					
Monitoring Station	14-12-2017	12-01-2018	15-02-2018	15.03.2018	Acceptable	Permissible
Dt. of sampling	14-12-2017	12-01-2018	15-02-2018	15.03.2018	Acceptable	Permissible
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	1	1	1	5
pH	7.27	7.15	6.90	7.41	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	68	56	8	52	200	600
Total Hardness(mg/L)	180	132	20	128	200	600
Iron(mg/L)	<0.06	0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	8	18	6	14	250	1000
Residual Free chlorine(mg/L)	-	-	-	-	0.2	1
Total Dissolve Solid(mg/L)	310	266	100	375	500	2000
Calcium(mg/L)	44.8	32	3.2	36.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.04	<0.02	0.1	0.3
Sulphate(mg/L)	98	72	8	89	200	400
Nitrate(mg/L)	3.4	2.67	1.01	-	45	No relaxation
Fluoride(mg/L)	0.55	0.65	0.28	0.44	1	1.5
Selenium(mg/L)	-	-	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.11	0.05	0.02	0.04	5	15
Total Chromium (mg/L)	0.05	<0.05	0.12	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 205
Drinking Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Project Site Office Water (Monthly)

Project / OCP Monitoring Station	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Project Site Office Water					
Dt. of sampling	23.04.2017	12-05-2017	15-06-2017	14-07-2017	Acceptable	Permissible
Colour(Hazen)	4	4	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	1	5	1	5
pH	7.43	7.50	6.88	7.22	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	12	28	16	200	600
Total Hardness(mg/L)	168	80	300	168	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.38	0.3	No relaxation
Chloride(mg/L)	34	18	48	30	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	272	184	440	264	500	2000
Calcium(mg/L)	38.4	20.8	51.2	40	75	200
Copper(mg/L)	0.05	0.03	<0.03	0.12	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	0.09	0.1	0.3
Sulphate(mg/L)	8	37	9	10	200	400
Nitrate(mg/L)	5.47	3.99	6.37	4.43	45	No relaxation
Fluoride(mg/L)	0.6	0.6	0.43	0.21	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.005	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	0.04	<0.02	0.21	5	15
Total Chromium (mg/L)	<0.01	-	<0.05	0.49	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 206
Drinking Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Project Site Office Water (Monthly)

Project / OCP Monitoring Station	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Project Site Office Water					
Dt. of sampling	12-08-2017	15-09-2017	12-10-2017	13-11-2017	Acceptable	Permissible
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	3	1	1	5
pH	6.92	6.69	7.41	7.54	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	24	20	12	200	600
Total Hardness(mg/L)	328	308	440	452	200	600
Iron(mg/L)	0.10	0.06	0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	14	28	36	36	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	580	628	868	758	500	2000
Calcium(mg/L)	76.8	78.4	104	102.4	75	200
Copper(mg/L)	0.04	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.23	0.03	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	204	234	348	224	200	400
Nitrate(mg/L)	5.76	7.47	6.87	2.02	45	No relaxation
Fluoride(mg/L)	0.48	0.51	0.80	0.16	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.003	-	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	-	0.01	No relaxation
Zinc(mg/L)	0.13	0.25	0.39	0.24	5	15
Total Chromium (mg/L)	0.06	0.16	<0.05	0.13	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	-	0.5	1.0
Phenolics(mg/L)				-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	-	0.003	No relaxation

Table: 207
Drinking Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Project Site Office Water (Monthly)

Project / OCP Monitoring Station	Jagannath OCP Project Site Office Water				Indian Drinking Standards (IS-10500):2012	
	Dt. of sampling	15-12-2017	13-01-2018	15-02-2018	13.03.2018	Acceptable
Colour(Hazen)	2	2	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	2	1	1	5
pH	7.28	7.66	7.71	6.80	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	116	96	236	12	200	600
Total Hardness(mg/L)	404	96	288	36	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	36	16	36	6	250	1000
Residual Free chlorine(mg/L)	-	-	-	-	0.2	1
Total Dissolve Solid(mg/L)	706	198	628	152	500	2000
Calcium(mg/L)	94.4	17.6	51.2	14.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.04	<0.02	0.1	0.3
Sulphate(mg/L)	220	14	10	13	200	400
Nitrate(mg/L)	8.5	2.89	2.06	-	45	No relaxation
Fluoride(mg/L)	0.7	0.21	0.83	0.69	1	1.5
Selenium(mg/L)	-	-	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.02	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.19	0.49	<0.02	0.02	5	15
Total Chromium (mg/L)	0.06	<0.05	0.13	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 208
Drinking Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Naraharipur Village Tubewell Water (Monthly)

Project / OCP Monitoring Station	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Naraharipur Village Tubewell Water					
Dt. of sampling	23.04.2017	12-05-2017	15-06-2017	14-07-2017	Acceptable	Permissible
Colour(Hazen)	2	2	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	1	3	1	5
pH	7.30	7.43	6.88	7.07	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	40	28	28	24	200	600
Total Hardness(mg/L)	392	296	300	384	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.19	0.3	No relaxation
Chloride(mg/L)	84	52	48	80	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	610	458	440	648	500	2000
Calcium(mg/L)	96	54.4	51.2	76.8	75	200
Copper(mg/L)	0.07	<0.03	<0.03	0.1	0.05	1.5
Manganese(mg/L)	0.25	<0.02	<0.02	0.09	0.1	0.3
Sulphate(mg/L)	27	18	9	68	200	400
Nitrate(mg/L)	7.47	6.37	6.37	7.76	45	No relaxation
Fluoride(mg/L)	0.63	0.57	0.43	0.27	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.004	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.45	0.03	<0.02	0.05	5	15
Total Chromium (mg/L)	-	-	<0.05	0.47	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 209
Drinking Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Naraharipur Village Tubewell Water

Project / OCP Monitoring Station	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Naraharipur Village Tubewell Water				Acceptable	Permissible
Dt. of sampling	12-08-2017	15-09-2017	12-10-2017	13-11-2017		
Colour(Hazen)	2	2	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	2	1	1	5
pH	7.08	6.82	7.61	7.01	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	16	20	28	200	600
Total Hardness(mg/L)	260	144	216	272	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	32	54	30	34	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	-	0.2	1
Total Dissolve Solid(mg/L)	320	288	348	360	500	2000
Calcium(mg/L)	52.8	41.6	56	49.6	75	200
Copper(mg/L)	0.06	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.03	0.03	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	11	42	68	12	200	400
Nitrate(mg/L)	4.76	4.47	4.76	<1	45	No relaxation
Fluoride(mg/L)	0.53	0.41	0.24	0.17	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.003	-	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005		0.01	No relaxation
Zinc(mg/L)	0.23	0.09	0.03	0.21	5	15
Total Chromium (mg/L)	0.08	0.15	<0.05	0.21	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	-	0.5	1.0
Phenolics(mg/L)	-		-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	-	0.003	No relaxation

Table: 210
Drinking Water Quality Data
Area: Jagannath
Project: Bhubaneswari OCP
Monitoring Station: Naraharipur Village Tubewell Water

Project / OCP Monitoring Station	Jagannath OCP				Indian Drinking Standards (IS-10500):2012	
	Naraharipur Village Tubewell Water					
Dt. of sampling	15-12-2017	13-01-2018	15-02-2018	13.03.2018	Acceptable	Permissible
Colour(Hazen)	2	3	3	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	2	3	2	1	5
pH	7.50	7.63	7.98	7.45	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	240	208	64	52	200	600
Total Hardness(mg/L)	288	248	184	280	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	40	38	16	16	250	1000
Residual Free chlorine(mg/L)	-	-	-	-	0.2	1
Total Dissolve Solid(mg/L)	410	374	456	676	500	2000
Calcium(mg/L)	38.4	44.8	52.8	83.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	0.06	0.04	<0.02	0.1	0.3
Sulphate(mg/L)	12	3	92	242	200	400
Nitrate(mg/L)	6.8	3.85	2.47	-	45	No relaxation
Fluoride(mg/L)	0.37	1.05	0.38	0.60	1	1.5
Selenium(mg/L)	-	-	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.13	1.33	0.42	0.18	5	15
Total Chromium (mg/L)	0.06	0.05	0.13	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 211
Drinking Water Quality Data
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Tap Water in Nehru Satabdi Nagar (Quarterly)

Project / OCP Monitoring Station	Bharatpur OCP				Indian Drinking Standards (IS-10500):2012	
	Tap Water in Nehru Satabdi Nagar					
Dt. of sampling	26.04.17	14-07-2017	13-10-2017	13-01-2018	Acceptable	Permissible
Colour(Hazen)	4	3	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	6	3	2	1	5
pH	7.36	7.23	7.85	7.32	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	36	12	152	200	600
Total Hardness(mg/L)	168	232	112	216	200	600
Iron(mg/L)	<0.06	0.19	<0.06	0.06	0.3	No relaxation
Chloride(mg/L)	32	34	16	36	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	-	0.2	1
Total Dissolve Solid(mg/L)	292	370	210	372	500	2000
Calcium(mg/L)	49.6	70.4	28.8	65.6	75	200
Copper(mg/L)	<0.03	0.12	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.2	0.1	<0.02	0.15	0.1	0.3
Sulphate(mg/L)	17	17	48	14	200	400
Nitrate(mg/L)	4.76	6.76	3.47	4.46	45	No relaxation
Fluoride(mg/L)	0.52	0.41	0.33	0.65	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.005	0.003	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	0.06	0.2	<0.02	5	15
Total Chromium (mg/L)	-	0.34	<0.05	0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 212
Drinking Water Quality Data
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Badasinga Village (Quarterly)

Project / OCP Monitoring Station	Bharatpur OCP				Indian Drinking Standards (IS-10500):2012	
	Badasinga Village					
Dt. of sampling	14-05-2017	12-08-2017	13-11-2017	15-02-2018	Acceptable	Permissible
Colour(Hazen)	8	2	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	2	1	1	5
pH	7.31	6.96	8.26	7.88	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	16	28	220	200	600
Total Hardness(mg/L)	248	208	224	272	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	186	12	164	184	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	-		0.2	1
Total Dissolve Solid(mg/L)	708	354	610	864	500	2000
Calcium(mg/L)	78.4	57.6	67.2	78.4	75	200
Copper(mg/L)	0.03	0.05	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.02	<0.02	0.03	0.1	0.3
Sulphate(mg/L)	148	78	138	98	200	400
Nitrate(mg/L)	6.76	6.17	12.31	3.78	45	No relaxation
Fluoride(mg/L)	0.52	0.62	0.12	0.61	1	1.5
Selenium(mg/L)	<0.002	<0.002	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	-	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	-	<0.005	0.01	No relaxation
Zinc(mg/L)	0.07	0.02	<0.02	0.03	5	15
Total Chromium (mg/L)	-	0.10	0.1	0.14	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	-	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	-	<0.0005	0.003	No relaxation

Table: 213
Drinking Water Quality Data
Area: Bharatpur
Project: Bharatpur OCP
Monitoring Station: Time Office (BOCP) (Quarterly)

Project / OCP Monitoring Station	Bharatpur OCP				Indian Drinking Standards (IS-10500):2012	
	Time Office (BOCP)					
Dt. of sampling	15-06-2017	14-09-2017	15-12-2017	13.03.2018	Acceptable	Permissible
Colour(Hazen)	4	2	7	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	4	2	1	5
pH	6.94	6.90	6.89	7.40	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	24	156	152	200	600
Total Hardness(mg/L)	120	164	220	216	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	16	70	32	30	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	-	-	0.2	1
Total Dissolve Solid(mg/L)	256	306	342	496	500	2000
Calcium(mg/L)	33.6	19.2	65.6	40	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.1	<0.02	0.1	0.3
Sulphate(mg/L)	74	10	14	18	200	400
Nitrate(mg/L)	4.76	5.47	4.5	--	45	No relaxation
Fluoride(mg/L)	0.47	0.37	0.47	0.39	1	1.5
Selenium(mg/L)	<0.002	<0.002	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.1	0.03	0.04	0.02	5	15
Total Chromium (mg/L)	0.12	0.16	<0.05	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	-	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 214
Drinking Water Quality Data
Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Ananta Colony Tap Water (Quarterly)

Project / OCP	Ananta OCP				Indian Drinking Standards (IS-10500):2012	
	Ananta Colony Tap Water					
Monitoring Station	14-05-2017	12-08-2017	13-11-2017	15/02/018	Acceptable	Permissible
Dt. of sampling	14-05-2017	12-08-2017	13-11-2017	15/02/018	Acceptable	Permissible
Colour(Hazen)	6	2	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	4	2	2	1	5
pH	7.40	7.28	7.85	7.80	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	12	8	56	200	600
Total Hardness(mg/L)	68	72	108	96	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	28	26	14	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	-	-	0.2	1
Total Dissolve Solid(mg/L)	132	202	208	266	500	2000
Calcium(mg/L)	16	16	25.6	24	75	200
Copper(mg/L)	0.05	0.06	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.03	<0.02	0.04	0.1	0.3
Sulphate(mg/L)	19	52	39	32	200	400
Nitrate(mg/L)	3.76	3.99	<1	1.98	45	No relaxation
Fluoride(mg/L)	0.53	0.63	0.11	0.66	1	1.5
Selenium(mg/L)	<0.002	<0.002	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	-	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	-	<0.005	0.01	No relaxation
Zinc(mg/L)	0.1	0.83	0.03	0.06	5	15
Total Chromium (mg/L)	-	0.10	0.09	0.16	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	-	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	-	<0.0005	0.003	No relaxation

Table: 215
Drinking Water Quality Data
Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Hensmul Village Well Water (Yearly Once)

Project / OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Hensmul village Well water		
Dt. of sampling	26.04.17	Acceptable	Permissible
Colour(Hazen)	4	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	5
pH	7.12	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	200	600
Total Hardness(mg/L)	204	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	52	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	410	500	2000
Calcium(mg/L)	56	75	200
Copper(mg/L)	0.05	0.05	1.5
Manganese(mg/L)	0.14	0.1	0.3
Sulphate(mg/L)	88	200	400
Nitrate(mg/L)	4.76	45	No relaxation
Fluoride(mg/L)	0.68	1	1.5
Selenium(mg/L)	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	5	15
Boron(mg/L)	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 216
Drinking Water Quality Data
Area: Bharatpur
Project: Ananta OCP
Monitoring Station: Dera Village Tubewell Water (Yearly Once)

Project / OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Dera village Tube well water		
Dt. of sampling	26.04.17	Acceptable	Permissible
Colour(Hazen)	8	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	5
pH	7.11	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	200	600
Total Hardness(mg/L)	148	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	48	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	280	500	2000
Calcium(mg/L)	38.4	75	200
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	0.15	0.1	0.3
Sulphate(mg/L)	46	200	400
Nitrate(mg/L)	3.99	45	No relaxation
Fluoride(mg/L)	0.47	1	1.5
Selenium(mg/L)	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	5	15
Boron(mg/L)	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 217
Drinking Water Quality Data
Area: Bharatpur
Project: Chhendipada OCP
Monitoring Station: Borewell Water at Site Office (Yearly Once)

Project / OCP	Chhendipada	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Borewell Water at Site Office		
Dt. of sampling	21.04.17	Acceptable	Permissible
Colour(Hazen)	2	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	5
pH	7.43	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	200	600
Total Hardness(mg/L)	320	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	112	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	540	500	2000
Calcium(mg/L)	64	75	200
Copper(mg/L)	0.08	0.05	1.5
Manganese(mg/L)	0.12	0.1	0.3
Sulphate(mg/L)	17	200	400
Nitrate(mg/L)	5.87	45	No relaxation
Fluoride(mg/L)	0.43	1	1.5
Selenium(mg/L)	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	5	15
Boron(mg/L)	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 218
Drinking Water Quality Data
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Project Office Tubewell Water (Yearly Once)

Project / OCP	Kaniha OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Project office tube well water	Acceptable	Permissible
Dt. of sampling	26.04.17	Acceptable	Permissible
Colour(Hazen)	2	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	5
pH	7.08	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	40	200	600
Total Hardness(mg/L)	352	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	52	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	538	500	2000
Calcium(mg/L)	67.2	75	200
Copper(mg/L)	0.07	0.05	1.5
Manganese(mg/L)	<0.02	0.1	0.3
Sulphate(mg/L)	35	200	400
Nitrate(mg/L)	6.78	45	No relaxation
Fluoride(mg/L)	0.61	1	1.5
Selenium(mg/L)	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	0.39	5	15
Boron(mg/L)	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 219
Drinking Water Quality Data
Area: Kaniha
Project: Kaniha OCP
Monitoring Station: Jarda Village (Yearly Once)

Project / OCP	Kaniha OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Jarda village	Acceptable	Permissible
Dt. of sampling	26.04.17	Acceptable	Permissible
Colour(Hazen)	2	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	5
pH	7.22	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	200	600
Total Hardness(mg/L)	288	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	140	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	578	500	2000
Calcium(mg/L)	75.2	75	200
Copper(mg/L)	0.09	0.05	1.5
Manganese(mg/L)	<0.02	0.1	0.3
Sulphate(mg/L)	75	200	400
Nitrate(mg/L)	5.87	45	No relaxation
Fluoride(mg/L)	0.58	1	1.5
Selenium(mg/L)	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	0.05	5	15
Boron(mg/L)	<0.20	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 220
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Well from Balunga Khamar Village

Project / OCP	Lingraj OCP		Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	Well from Balunga Khamar Village		
Dt. of sampling	26.04.17	13-01-2018	Acceptable	Permissible
Colour(Hazen)	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	1	5
pH	7.1	6.65	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	120	200	600
Total Hardness(mg/L)	104	204	200	600
Iron(mg/L)	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	52	36	250	1000
Residual Free chlorine(mg/L)	<1.0	-	0.2	1
Total Dissolve Solid(mg/L)	238	348	500	2000
Calcium(mg/L)	28.8	51.2	75	200
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	0.02	0.1	0.3
Sulphate(mg/L)	17	54	200	400
Nitrate(mg/L)	4.76	1.63	45	No relaxation
Fluoride(mg/L)	0.47	0.41	1	1.5
Selenium(mg/L)	<0.002	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	<0.02	5	15
Total Chromium (mg/L)		<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation

Table: 221
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Well from Deulbera and Talbera Village

Project / OCP	Lingraj OCP		Indian Drinking Standards (IS-10500):2012	
	Well from Deulbera Village	Well From Talbera Village		
Dt. of sampling	15-07-2017	13-10-2017	Acceptable	Permissible
Colour(Hazen)	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	1	5
pH	6.86	7.72	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	16	200	600
Total Hardness(mg/L)	752	188	200	600
Iron(mg/L)	0.22	<0.06	0.3	No relaxation
Chloride(mg/L)	362	34	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	1688	320	500	2000
Calcium(mg/L)	233.6	48	75	200
Copper(mg/L)	0.04	<0.03	0.05	1.5
Manganese(mg/L)	0.38	<0.02	0.1	0.3
Sulphate(mg/L)	248	58	200	400
Nitrate(mg/L)	16.76	5.76	45	No relaxation
Fluoride(mg/L)	0.43	0.42	1	1.5
Selenium(mg/L)	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	0.006	0.003	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.07	0.04	5	15
Total Chromium (mg/L)	0.36	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)			0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation

Table: 222
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Deulbera Tap Water (Monthly)

Project / OCP Monitoring Station	Lingraj OCP Deulbera Tap Water				Indian Drinking Standards (IS-10500):2012	
	Dt. of sampling 13-05-2017	15-06-2017	15-07-2017	12-08-2017	Acceptable	Permissible
Colour(Hazen)	4	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	3	2	1	5
pH	7.62	7.48	7.36	6.60	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	12	8	12	200	600
Total Hardness(mg/L)	536	60	112	212	200	600
Iron(mg/L)	<0.06	<0.06	0.28	<0.06	0.3	No relaxation
Chloride(mg/L)	106	12	14	40	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	838	124	230	380	500	2000
Calcium(mg/L)	72	14.4	30.4	54.4	75	200
Copper(mg/L)	<0.03	<0.03	0.13	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.1	0.03	0.1	0.3
Sulphate(mg/L)	70	6	82	92	200	400
Nitrate(mg/L)	7.67	2.37	3.07	4.43	45	No relaxation
Fluoride(mg/L)	0.47	0.38	0.32	0.74	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.003	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	<0.02	0.07	<0.02	5	15
Total Chromium (mg/L)	-	0.14	0.52	0.09	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	--	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 223
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Deulbera Tap Water (Monthly)

Project / OCP	Lingraj OCP				Indian Drinking Standards (IS-10500):2012	
	Deulbera Tap Water					
Monitoring Station	13-10-2017	15-11-2017	15-12-2017	15-02-2018	Acceptable	Permissible
Dt. of sampling	13-10-2017	15-11-2017	15-12-2017	15-02-2018	Acceptable	Permissible
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	3	1	1	5
pH	7.86	7.90	7.58	7.64	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	8	44	56	200	600
Total Hardness(mg/L)	116	140	68	88	200	600
Iron(mg/L)	<0.06	<0.06	0.1	<0.06	0.3	No relaxation
Chloride(mg/L)	28	16	10	14	250	1000
Residual Free chlorine(mg/L)	<1.0	-			0.2	1
Total Dissolve Solid(mg/L)	230	246	140	278	500	2000
Calcium(mg/L)	25.6	36.8	16	20.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.02	0.05	0.1	0.3
Sulphate(mg/L)	56	62	16	32	200	400
Nitrate(mg/L)	3.99	<1	0.6	0.98	45	No relaxation
Fluoride(mg/L)	0.49	0.16	0.43	0.43	1	1.5
Selenium(mg/L)	<0.002	-			0.01	No relaxation
Arsenic(mg/L)	0.004	-	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	-	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	0.03	0.15	0.23	5	15
Total Chromium (mg/L)	<0.05	0.11	<0.05	0.12	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	-	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-		0.001	0.002
Cadmium(mg/L)	<0.0005	-	<0.0005	<0.0005	0.003	No relaxation

Table: 224
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Deulbera Tap Water (Monthly)

Project / OCP	Lingraj OCP	Indian Drinking Standards (IS-10500):2012	
		Monitoring Station	Deulbera Tap Water
Dt. of sampling	15.03.2018	Acceptable	Permissible
Colour(Hazen)	2	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	5
pH	7.65	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	40	200	600
Total Hardness(mg/L)	52	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	8	250	1000
Residual Free chlorine(mg/L)	-	0.2	1
Total Dissolve Solid(mg/L)	196	500	2000
Calcium(mg/L)	14.4	75	200
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.1	0.3
Sulphate(mg/L)	7	200	400
Nitrate(mg/L)	-	45	No relaxation
Fluoride(mg/L)	0.46	1	1.5
Selenium(mg/L)		0.01	No relaxation
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	0.005	0.01	No relaxation
Zinc(mg/L)	0.07	5	15
Total Chromium (mg/L)	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	0.5	1.0
Phenolics(mg/L)	-	0.001	0.002
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 225
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: MTK Office Tap Water, LOCP

Project / OCP	Lingraj OCP			Indian Drinking Standards (IS-10500):2012	
	MTK Office Tap Water, LOCP				
Monitoring Station					
Dt. of sampling	14-05-2017	15-09-2017	13-01-2018	Acceptable	Permissible
Colour(Hazen)	4	4	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	2	1	5
pH	7.60	7.14	7.02	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	12	60	200	600
Total Hardness(mg/L)	64	96	88	200	600
Iron(mg/L)	<0.06	<0.06	0.12	0.3	No relaxation
Chloride(mg/L)	14	18	14	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	148	194	168	500	2000
Calcium(mg/L)	16	25.6	20.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.03	0.05	0.07	0.1	0.3
Sulphate(mg/L)	16	48	36	200	400
Nitrate(mg/L)	3.76	3.99	2.65	45	No relaxation
Fluoride(mg/L)	0.29	0.69	0.36	1	1.5
Selenium(mg/L)	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.06	0.07	0.1	5	15
Total Chromium (mg/L)		0.14	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 226
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Lingraj Township Tap Water

Project / OCP Monitoring Station	Lingraj OCP			Indian Drinking Standards (IS-10500):2012	
	Lingraj Township Tap Water				
Dt. of sampling	15-06-2017	13-10-2017	15-02-2018	Acceptable	Permissible
Colour(Hazen)	6	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	2	1	5
pH	7.57	8.05	7.93	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	12	72	200	600
Total Hardness(mg/L)	120	72	128	200	600
Iron(mg/L)	0.19	0.12	<0.06	0.3	No relaxation
Chloride(mg/L)	26	10	24	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	-	0.2	1
Total Dissolve Solid(mg/L)	228	112	322	500	2000
Calcium(mg/L)	27.2	19.2	32	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.03	0.1	0.3
Sulphate(mg/L)	24	20	60	200	400
Nitrate(mg/L)	4.43	2.87	1.47	45	No relaxation
Fluoride(mg/L)	0.62	0.2	0.34	1	1.5
Selenium(mg/L)	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	0.004	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.006	<0.005	0.01	No relaxation
Zinc(mg/L)	0.2	0.03	0.05	5	15
Total Chromium (mg/L)	0.13	<0.05	0.14	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 227
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Tap Water GM Office

Project / OCP Monitoring Station	Lingraj OCP Tap Water GM Office			Indian Drinking Standards (IS-10500):2012	
	Dt. of sampling 14-07-2017	15-11-2017	15.03.2018	Acceptable	Permissible
Colour(Hazen)	4	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	2	1	5
pH	7.10	7.55	7.38	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	8	32	200	600
Total Hardness(mg/L)	68	44	52	200	600
Iron(mg/L)	0.21	<0.06	0.07	0.3	No relaxation
Chloride(mg/L)	14	14	8	250	1000
Residual Free chlorine(mg/L)	<1.0			0.2	1
Total Dissolve Solid(mg/L)	178	106	172	500	2000
Calcium(mg/L)	14.4	14.4	16	75	200
Copper(mg/L)	0.1	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.16	0.02	<0.02	0.1	0.3
Sulphate(mg/L)	58	15	10	200	400
Nitrate(mg/L)	6.47	<1	-	45	No relaxation
Fluoride(mg/L)	0.32	0.15	0.38	1	1.5
Selenium(mg/L)	<0.002	-	-	0.01	No relaxation
Arsenic(mg/L)	0.004	-	<0.002	0.01	0.05
Lead(mg/L)	<0.005	-	0.006	0.01	No relaxation
Zinc(mg/L)	0.49	0.92	0.06	5	15
Total Chromium (mg/L)	0.38	0.1	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	-	<0.2	0.5	1.0
Phenolics(mg/L)	<0.0005	-	-	0.001	0.002
Cadmium(mg/L)		-	<0.0005	0.003	No relaxation

Table: 228
Drinking Water Quality Data
Area: Lingraj
Project: Lingraj OCP
Monitoring Station: Deulbera Colony Tap Water

Project / OCP Monitoring Station	Lingraj OCP				Indian Drinking Standards (IS-10500):2012	
	Deulbera Colony Tap Water				Acceptable	Permissible
Dt. of sampling	12-08-2017	15-09-2017	15-12-2017	13-01-2018		
Colour(Hazen)	4	2	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	2	2	1	5
pH	6.80	7.12	7.96	7.18	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	12	36	28	200	600
Total Hardness(mg/L)	48	52	56	48	200	600
Iron(mg/L)	<0.06	0.08	0.17	0.08	0.3	No relaxation
Chloride(mg/L)	12	10	8	12	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	-	-	0.2	1
Total Dissolve Solid(mg/L)	110	116	110	94	500	2000
Calcium(mg/L)	9.6	12.8	14.4	12.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.05	0.03	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	32	30	10	16	200	400
Nitrate(mg/L)	2.76	2.76	0.4	2.22	45	No relaxation
Fluoride(mg/L)	0.63	0.38	0.39	0.51	1	1.5
Selenium(mg/L)	<0.002	<0.002	-	-	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	1.16	2.08	0.02	0.13	5	15
Total Chromium (mg/L)	0.11	0.21	<0.05	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)		<0.0005	-	-	0.001	0.002
Cadmium(mg/L)	<0.0005	-	<0.0005	<0.0005	0.003	No relaxation

Table: 229
Drinking Water Quality Data
Area: Hingula
Project: Hingula OCP
Monitoring Station: Gopalprasad and Kumunda Village Borewell Water

Project / OCP	Hingula OCP		Indian Drinking Standards (IS-10500):2012	
	Gopalprasad Village Borewell Water	Kumunda Village Borewell Water		
Dt. of sampling	26.04.17	26.04.17	Acceptable	Permissible
Colour(Hazen)	8	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	1	5
pH	7.93	7.15	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	40	200	600
Total Hardness(mg/L)	156	452	200	600
Iron(mg/L)	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	54	112	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	280	768	500	2000
Calcium(mg/L)	24	65.6	75	200
Copper(mg/L)	0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.11	0.09	0.1	0.3
Sulphate(mg/L)	10	71	200	400
Nitrate(mg/L)	4.76	7.76	45	No relaxation
Fluoride(mg/L)	0.51	0.37	1	1.5
Selenium(mg/L)	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.24	<0.02	5	15
Total Chromium (mg/L)	<0.2	<0.2	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.0005	<0.0005	0.5	1.0
Phenolics(mg/L)			0.001	0.002
Cadmium(mg/L)			0.003	No relaxation

Table: 230
Drinking Water Quality Data
Area: Hingula
Project: Hingula OCP
Monitoring Station: Time Office Water

Project / OCP Monitoring Station	Hingula OCP				Indian Drinking Standards (IS-10500):2012	
	Time Office Water				Acceptable	Permissible
Dt. of sampling	26.04.17	12-05-2017	15-06-2017	07-07-2017		
Colour(Hazen)	2	2	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	1	2	1	5
pH	7.27	8.05	7.68	7.31	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	20	20	32	200	600
Total Hardness(mg/L)	156	156	244	160	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.21	0.3	No relaxation
Chloride(mg/L)	84	74	48	64	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	306	292	376	326	500	2000
Calcium(mg/L)	19.2	20.8	67.2	20.8	75	200
Copper(mg/L)	0.05	0.05	<0.03	0.08	0.05	1.5
Manganese(mg/L)	0.1	<0.02	<0.02	0.11	0.1	0.3
Sulphate(mg/L)	8	8	10	8	200	400
Nitrate(mg/L)	4.43	4.43	5.76	7.87	45	No relaxation
Fluoride(mg/L)	0.48	0.36	0.58	0.47	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.003	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.002	<0.002	<0.02	0.11	5	15
Total Chromium (mg/L)			0.15	0.39	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 231
Drinking Water Quality Data
Area: Hingula
Project: Hingula OCP
Monitoring Station: Time Office Water

Project / OCP Monitoring Station	Hingula OCP				Indian Drinking Standards (IS-10500):2012	
	Time Office Water				Acceptable	Permissible
Dt. of sampling	10-08-2017	12-10-2017	14-11-2017	14-12-2017		
Colour(Hazen)	2	3	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	4	1	5
pH	7.20	8.05	7.96	7.79	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	20	12	152	200	600
Total Hardness(mg/L)	152	152	156	164	200	600
Iron(mg/L)	0.13	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	62	64	66	70	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0			0.2	1
Total Dissolve Solid(mg/L)	298	280	268	330	500	2000
Calcium(mg/L)	19.2	36.8	17.8	20.8	75	200
Copper(mg/L)	0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	8	10	10	12	200	400
Nitrate(mg/L)	5.87	4.76	2.46	4.3	45	No relaxation
Fluoride(mg/L)	0.43	0.58	0.14	0.37	1	1.5
Selenium(mg/L)	<0.002	<0.002			0.01	No relaxation
Arsenic(mg/L)	<0.002	0.003		<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005		<0.005	0.01	No relaxation
Zinc(mg/L)	0.15	0.02	<0.02	0.06	5	15
Total Chromium (mg/L)	0.09	<0.05	0.1	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2		<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005		<0.0005	0.003	No relaxation

Table: 232
Drinking Water Quality Data
Area: Hingula
Project: Hingula OCP
Monitoring Station: Time Office Water

Project / OCP	Hingula OCP			Indian Drinking Standards (IS-10500):2012	
	Time Office Water				
Monitoring Station	12-01-2018	15-02-2018	13.03.2018	Acceptable	Permissible
Dt. of sampling	12-01-2018	15-02-2018	13.03.2018	Acceptable	Permissible
Colour(Hazen)	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	2	1	1	5
pH	7.81	8.02	7.95	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	144	140	140	200	600
Total Hardness(mg/L)	156	156	160	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	70	68	70	250	1000
Residual Free chlorine(mg/L)				0.2	1
Total Dissolve Solid(mg/L)	300	374	436	500	2000
Calcium(mg/L)	19.2	17.6	19.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	0.03	<0.02	0.1	0.3
Sulphate(mg/L)	5	8	5	200	400
Nitrate(mg/L)	2.78	2.10		45	No relaxation
Fluoride(mg/L)	0.55	0.28	0.35	1	1.5
Selenium(mg/L)				0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.03	0.11	0.02	5	15
Total Chromium (mg/L)	<0.05	0.14	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 233
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Danara Village Borewell Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Danara Village Borewell Water				Acceptable	Permissible
Dt. of sampling	26.04.17	12-05-2017	15-06-2017	07-07-2017		
Colour(Hazen)	2	2	8	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	3	2	1	5
pH	7.34	6.88	7.37	7.33	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	12	12	16	200	600
Total Hardness(mg/L)	100	84	96	124	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.19	0.3	No relaxation
Chloride(mg/L)	56	54	46	34	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	214	184	198	236	500	2000
Calcium(mg/L)	28.8	27.2	30.4	43.2	75	200
Copper(mg/L)	0.06	0.03	<0.03	0.13	0.05	1.5
Manganese(mg/L)	0.75	0.5	0.48	0.18	0.1	0.3
Sulphate(mg/L)	30	10	17	6	200	400
Nitrate(mg/L)	3.99	3.99	3.07	5.87	45	No relaxation
Fluoride(mg/L)	0.55	0.47	0.48	0.63	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.02	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.78	0.14	0.08	0.98	5	15
Total Chromium (mg/L)			0.13	0.34	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 234
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Danara Village Borewell Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Danara Village Borewell Water				Acceptable	Permissible
Dt. of sampling	12-08-2017	14-09-2017	13-10-2017	13-11-2017		
Colour(Hazen)	3	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	4	1	1	5
pH	6.98	6.82	6.25	6.98	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	12	8	16	200	600
Total Hardness(mg/L)	452	196	60	160	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	24	76	20	38	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	830	362	126	268	500	2000
Calcium(mg/L)	92.8	62.4	11.2	46.4	75	200
Copper(mg/L)	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.03	0.05	0.17	0.16	0.1	0.3
Sulphate(mg/L)	286	46	14	12	200	400
Nitrate(mg/L)	6.76	4.76	2.43	2.94	45	No relaxation
Fluoride(mg/L)	0.54	0.56	0.20	0.10	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.003		0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005		0.01	No relaxation
Zinc(mg/L)	0.11	0.05	0.15	0.33	5	15
Total Chromium (mg/L)	0.10	0.14	<0.05	0.09	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2		0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 235
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Danara Village Borewell Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Danara Village Borewell Water				Acceptable	Permissible
Dt. of sampling	15-12-2017	13-01-2018	15-02-2018	13.03.2018		
Colour(Hazen)	2	5	4	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	5	1	2	1	5
pH	6.11	6.66	6.84	6.15	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	48	28	28	200	600
Total Hardness(mg/L)	164	60	136	128	200	600
Iron(mg/L)	<0.06	0.17	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	70	14	62	58	250	1000
Residual Free chlorine(mg/L)					0.2	1
Total Dissolve Solid(mg/L)	508	160	350	345	500	2000
Calcium(mg/L)	52.8	16.0	41.6	43.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	0.74	14	<0.01	0.1	0.3
Sulphate(mg/L)	50	3	36	24	200	400
Nitrate(mg/L)	62.60	2.26	2.64		45	No relaxation
Fluoride(mg/L)	0.41	0.37	0.44	0.56	1	1.5
Selenium(mg/L)					0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.03	0.22	0.05	0.06	5	15
Total Chromium (mg/L)	<0.05	0.05	0.15	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 236
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Balaram Colony Tap Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Balaram Colony Tap Water					
Dt. of sampling	26.04.17	12-05-2017	15-06-2017	07-07-2017	Acceptable	Permissible
Colour(Hazen)	2	2	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	1	1	1	5
pH	7.44	7.34	6.55	7.28	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	20	20	16	200	600
Total Hardness(mg/L)	324	228	156	404	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.24	0.3	No relaxation
Chloride(mg/L)	34	36	34	26	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	680	344	368	748	500	2000
Calcium(mg/L)	68.8	70.4	41.6	83.2	75	200
Copper(mg/L)	0.04	<0.03	<0.03	0.12	0.05	1.5
Manganese(mg/L)	0.1	0.09	<0.02	0.12	0.1	0.3
Sulphate(mg/L)	248	14	110	264	200	400
Nitrate(mg/L)	5.87	4.76	5.76	5.76	45	No relaxation
Fluoride(mg/L)	0.38	0.43	0.63	0.39	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.004	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.002	0.03	0.02	0.09	5	15
Total Chromium (mg/L)	-		0.14	0.39	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)	-				0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 237
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Balaram Colony Tap Water

Project / OCP	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Balaram Colony Tap Water					
Dt. of sampling	12-08-2017	14-09-2017	13-10-2017	13-11-2017	Acceptable	Permissible
Colour(Hazen)	2	2	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	2	3	1	5
pH	7.13	6.94	7.64	7.91	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	8	12	8	200	600
Total Hardness(mg/L)	328	312	264	340	200	600
Iron(mg/L)	0.08	0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	26	20	26	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	656	590	510	548	500	2000
Calcium(mg/L)	68.8	64	65.6	72	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	246	226	194	146	200	400
Nitrate(mg/L)	5.87	4.43	3.99	<1	45	No relaxation
Fluoride(mg/L)	0.63	0.63	0.77	0.20	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.003		0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005		0.01	No relaxation
Zinc(mg/L)	0.04	0.08	0.29	0.23	5	15
Total Chromium (mg/L)	0.10	0.14	<0.05	0.09	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2		0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 238
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Balaram Colony Tap Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Balaram Colony Tap Water				Acceptable	Permissible
Dt. of sampling	15-12-2017	13-01-2018	15-02-2018	13.03.2018		
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	2	1	1	5
pH	6.96	7.78	7.85	7.55	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56	48	52	112	200	600
Total Hardness(mg/L)	336	356	444	204	200	600
Iron(mg/L)	<0.06	0.1	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	28	28	28	24	250	1000
Residual Free chlorine(mg/L)					0.2	1
Total Dissolve Solid(mg/L)	610	688	1150	497	500	2000
Calcium(mg/L)	73.6	73.6	94.4	62.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	0.02	0.03	<0.02	0.1	0.3
Sulphate(mg/L)	218	216	480	76	200	400
Nitrate(mg/L)	3.2	3.98	374		45	No relaxation
Fluoride(mg/L)	0.67	0.56	0.26	0.42	1	1.5
Selenium(mg/L)					0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.31	0.03	0.1	0.04	5	15
Total Chromium (mg/L)	<0.05	0.05	0.14	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 239
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Nakeipasi Village Borewell Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Nakeipasi Village Borewell Water				Acceptable	Permissible
Dt. of sampling	26.04.17	12-05-2017	15-06-2017	07-07-2017		
Colour(Hazen)	4	4	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	6	1	5
pH	7.76	7.80	7.48	7.20	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	32	36	12	200	600
Total Hardness(mg/L)	364	400	440	396	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.21	0.3	No relaxation
Chloride(mg/L)	196	192	110	80	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	770	828	716	590	500	2000
Calcium(mg/L)	113.6	121.6	52.8	68.8	75	200
Copper(mg/L)	0.06	0.03	<0.03	0.12	0.05	1.5
Manganese(mg/L)	0.1	0.02	<0.02	0.11	0.1	0.3
Sulphate(mg/L)	146	144	68	68	200	400
Nitrate(mg/L)	6.23	7.47	7.47	5.37	45	No relaxation
Fluoride(mg/L)	0.46	0.42	0.54	0.35	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.004	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	0.08	<0.02	0.22	5	15
Total Chromium (mg/L)			0.12	0.37	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 240
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Nakeipasi Village Borewell Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Nakeipasi Village Borewell Water				Acceptable	Permissible
Dt. of sampling	12-08-2017	14-09-2017	13-10-2017	13-11-2017		
Colour(Hazen)	3	2	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	3	2	1	5
pH	7.05	6.78	8.00	7.60	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	28	8	24	200	600
Total Hardness(mg/L)	144	272	56	252	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	58	126	10	38	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	354	610	102	348	500	2000
Calcium(mg/L)	40	88	16	76.8	75	200
Copper(mg/L)	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	0.02	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	68	94	13	12	200	400
Nitrate(mg/L)	6.87	7.87	2.07	<1	45	No relaxation
Fluoride(mg/L)	0.48	0.43	0.62	0.12	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.004		0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005		0.01	No relaxation
Zinc(mg/L)	<0.02	0.04	0.02	<0.02	5	15
Total Chromium (mg/L)	0.10	0.14	<0.05	0.1	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2		0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 241
Drinking Water Quality Data
Area: Hingula
Project: Balaram OCP
Monitoring Station: Nakeipasi Village Borewell Water

Project / OCP Monitoring Station	Balaram OCP				Indian Drinking Standards (IS-10500):2012	
	Nakeipasi Village Borewell Water				Acceptable	Permissible
Dt. of sampling	15-12-2017	13-01-2018	15-02-2018	13.03.2018		
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	2	1	1	5
pH	7.80	7.52	7.40	7.03	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	180	172	184	176	200	600
Total Hardness(mg/L)	248	244	240	232	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	34	40	36	34	250	1000
Residual Free chlorine(mg/L)					0.2	1
Total Dissolve Solid(mg/L)	320	346	560	510	500	2000
Calcium(mg/L)	70.4	67.2	59.2	35.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.14	0.12	0.13	0.08	0.1	0.3
Sulphate(mg/L)	10	8	14	13	200	400
Nitrate(mg/L)	6.5	1.63	3.27		45	No relaxation
Fluoride(mg/L)	0.57	0.7	0.79	0.70	1	1.5
Selenium(mg/L)					0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.008	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.006	0.01	No relaxation
Zinc(mg/L)	0.42	<0.02	0.04	0.07	5	15
Total Chromium (mg/L)	<0.05	<0.05	0.13	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 242
Drinking Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Tap Water, GM Office

Project / OCP Monitoring Station	Talcher Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water, GM Office				Acceptable	Permissible
Dt. of sampling	27.04.17	13-05-2017	15-06-2017	15-07-2017		
Colour(Hazen)	2	4	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	3	5	1	5
pH	7.16	7.28	6.92	7.14	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	12	16	8	200	600
Total Hardness(mg/L)	76	76	80	60	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.24	0.3	No relaxation
Chloride(mg/L)	18	18	14	16	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	174	168	168	148	500	2000
Calcium(mg/L)	16	20.8	16	12.8	75	200
Copper(mg/L)	0.07	<0.04	<0.03	0.06	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	0.13	0.1	0.3
Sulphate(mg/L)	24	11	16	52	200	400
Nitrate(mg/L)	3.99	4.43	3.99	2.76	45	No relaxation
Fluoride(mg/L)	0.28	0.6	0.42	0.29	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.02	0.02	<0.02	0.06	5	15
Total Chromium (mg/L)			0.14	0.36	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.02	<0.02	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				<0.0005	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 243
Drinking Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Tap Water, GM Office

Project / OCP Monitoring Station	Talcher Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water, GM Office				Acceptable	Permissible
Dt. of sampling	12-08-2017	15-09-2017	13-10-2017	13-11-2017		
Colour(Hazen)	7	5	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	14	3	5	2	1	5
pH	6.86	6.10	7.77	7.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	8	16	8	200	600
Total Hardness(mg/L)	92	76	100	96	200	600
Iron(mg/L)	0.09	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	12	20	16	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	160	180	206	172	500	2000
Calcium(mg/L)	14.4	17.6	25.6	22.4	75	200
Copper(mg/L)	0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	0.04	0.03	0.12	0.1	0.3
Sulphate(mg/L)	40	44	48	32	200	400
Nitrate(mg/L)	3.76	3.47	3.76	<1	45	No relaxation
Fluoride(mg/L)	0.78	0.52	0.13	0.12	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.004		0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005		0.01	No relaxation
Zinc(mg/L)	<0.02	<0.02	0.02	0.19	5	15
Total Chromium (mg/L)	0.10	0.05	<0.05	0.09	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2		0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 244
Drinking Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Tap Water, GM Office

Project / OCP Monitoring Station	Talcher Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water, GM Office				Acceptable	Permissible
Dt. of sampling	13-12-2017	11-01-2018	15-02-2018	14.03.2018		
Colour(Hazen)	5	5	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	3	1	1	1	5
pH	7.11	7.28	7.66	7.29	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56	60	80	48	200	600
Total Hardness(mg/L)	100	48	128	84	200	600
Iron(mg/L)	0.18	0.08	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	14	14	16	10	250	1000
Residual Free chlorine(mg/L)					0.2	1
Total Dissolve Solid(mg/L)	162	152	318	230	500	2000
Calcium(mg/L)	24	19.2	27.2	20.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.09	0.06	0.07	<0.02	0.1	0.3
Sulphate(mg/L)	28	32	40	20	200	400
Nitrate(mg/L)	1.6	3.11	1.87		45	No relaxation
Fluoride(mg/L)	0.44	0.41	0.21	0.35	1	1.5
Selenium(mg/L)					0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.21	<0.02	0.34	0.13	5	15
Total Chromium (mg/L)	<0.05	<0.05	0.09	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 245
Drinking Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Tap Water, Talcher Colliery

Project / OCP Monitoring Station	Talcher Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water, Talcher Colliery				Acceptable	Permissible
Dt. of sampling	27.04.17	13-05-2017	15-06-2017	15-07-2017		
Colour(Hazen)	4	4	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	3	2	1	1	5
pH	7.26	7.35	7.35	7.17	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	16	20	8	200	600
Total Hardness(mg/L)	140	120	120	56	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.26	0.3	No relaxation
Chloride(mg/L)	24	24	20	14	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	258	238	238	138	500	2000
Calcium(mg/L)	30.4	28.8	28.8	14.4	75	200
Copper(mg/L)	<0.03	0.05	<0.03	0.1	0.05	1.5
Manganese(mg/L)	0.02	<0.02	<0.02	0.22	0.1	0.3
Sulphate(mg/L)	42	34	43	54	200	400
Nitrate(mg/L)	4.43	5.87	4.76	2.43	45	No relaxation
Fluoride(mg/L)	0.47	0.49	0.49	0.25	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.005	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.03	<0.02	<0.02	0.07	5	15
Total Chromium (mg/L)			0.13	0.37	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				<0.0005	0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 246
Drinking Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Tap Water, Talcher Colliery

Project / OCP Monitoring Station	Talcher Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water, Talcher Colliery				Acceptable	Permissible
Dt. of sampling	12-08-2017	15-09-2017	13-10-2017	13-11-2017		
Colour(Hazen)	7	4	5	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	14	3	3	1	1	5
pH	6.86	6.26	7.87	7.64	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	12	16	16	200	600
Total Hardness(mg/L)	92	104	128	112	200	600
Iron(mg/L)	0.09	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	12	18	70	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	160	208	308	198	500	2000
Calcium(mg/L)	14.4	24	30.4	25.6	75	200
Copper(mg/L)	0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	0.03	<0.02	0.03	0.1	0.3
Sulphate(mg/L)	40	36	45	22	200	400
Nitrate(mg/L)	3.76	4.43	5.47	<1	45	No relaxation
Fluoride(mg/L)	0.78	0.48	0.32	0.14	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.004		0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005		0.01	No relaxation
Zinc(mg/L)	<0.02	0.05	<0.02	0.11	5	15
Total Chromium (mg/L)	0.10	0.04	<0.05	0.09	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2		0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 247
Drinking Water Quality Data
Area: Talcher
Project: Talcher Colliery
Monitoring Station: Canteen Tap Water, Talcher Colliery

Project / OCP Monitoring Station	Talcher Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water, Talcher Colliery				Acceptable	Permissible
Dt. of sampling	13-12-2017	11-01-2018	15-02-2018	14.03.2018		
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	1	1	1	5
pH	7.60	7.32	7.62	7.42	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76	64	64	64	200	600
Total Hardness(mg/L)	120	100	116	104	200	600
Iron(mg/L)	0.15	0.07	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	16	18	16	250	1000
Residual Free chlorine(mg/L)					0.2	1
Total Dissolve Solid(mg/L)	218	170	294	270	500	2000
Calcium(mg/L)	28.8	24	25.6	27.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.05	0.06	0.06	<0.02	0.1	0.3
Sulphate(mg/L)	34	29	46	30	200	400
Nitrate(mg/L)	2.6	2.87	2.04		45	No relaxation
Fluoride(mg/L)	0.48	0.48	0.42	0.40	1	1.5
Selenium(mg/L)					0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.06	0.03	0.05	0.05	5	15
Total Chromium (mg/L)	<0.05	<0.05	0.1	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 248
Drinking Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Canteen Tap Water

Project / OCP Monitoring Station	Nandira Colliery				Indian Drinking Standards (IS-10500):2012	
	Canteen Tap Water				Acceptable	Permissible
Dt. of sampling	27.04.17	14-05-2017	15-06-2017	12-08-2017		
Colour(Hazen)	4	6	8	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	3	13	1	5
pH	7.10	7.47	7.67	7.10	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	12	20	8	200	600
Total Hardness(mg/L)	128	152	152	156	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.11	0.3	No relaxation
Chloride(mg/L)	18	22	18	14	250	1000
Residual Free chlorine(mg/L)		<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	284	310	316	296	500	2000
Calcium(mg/L)	33.6	35.2	36.8	38.4	75	200
Copper(mg/L)	0.07	0.05	<0.03	0.05	0.05	1.5
Manganese(mg/L)	<0.02	0.02	<0.02	0.03	0.1	0.3
Sulphate(mg/L)	88	92	84	108	200	400
Nitrate(mg/L)	5.37	5.76	5.37	4.76	45	No relaxation
Fluoride(mg/L)		0.39	0.46	0.76	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	0.06	<0.02	0.30	5	15
Total Chromium (mg/L)			0.12	0.07	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 249
Drinking Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Canteen Tap Water

Project / OCP	Nandira Colliery				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Canteen Tap Water					
Dt. of sampling	15-09-2017	14-10-2017	14-11-2017	14-12-2017	Acceptable	Permissible
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	5	2	3	1	5
pH	6.38	7.70	7.78	7.61	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	12	8	56	200	600
Total Hardness(mg/L)	160	188	152	156	200	600
Iron(mg/L)	0.07	<0.06	<0.06	0.08	0.3	No relaxation
Chloride(mg/L)	24	20	18	14	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0			0.2	1
Total Dissolve Solid(mg/L)	318	356	278	296	500	2000
Calcium(mg/L)	22.4	48	38.4	38.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	<0.02	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	102	107	80	104	200	400
Nitrate(mg/L)	5.76	4.43	<1	1.4	45	No relaxation
Fluoride(mg/L)	0.42	0.78	0.18	0.38	1	1.5
Selenium(mg/L)	<0.002	<0.002			0.01	No relaxation
Arsenic(mg/L)	<0.002	0.003		<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005		<0.005	0.01	No relaxation
Zinc(mg/L)	0.09	0.13	0.05	0.12	5	15
Total Chromium (mg/L)	0.05	<0.05	0.14	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2		<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005		<0.0005	0.003	No relaxation

Table: 250
Drinking Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Canteen Tap Water

Project / OCP Monitoring Station	Nandira Colliery Canteen Tap Water			Indian Drinking Standards (IS-10500):2012	
	12-01-2018	15-02-2018	15.03.2018	Acceptable	Permissible
Colour(Hazen)	2	7	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	2	1	5
pH	7.46	7.82	7.62	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	64	72	64	200	600
Total Hardness(mg/L)	152	164	160	200	600
Iron(mg/L)	<0.06	<0.06	0.06	0.3	No relaxation
Chloride(mg/L)	18	14	12	250	1000
Residual Free chlorine(mg/L)				0.2	1
Total Dissolve Solid(mg/L)	286	380	405	500	2000
Calcium(mg/L)	36.8	41.6	38.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.02	<0.02	0.1	0.3
Sulphate(mg/L)	63	74	95	200	400
Nitrate(mg/L)	1.46	3.26		45	No relaxation
Fluoride(mg/L)	0.39	0.36	0.55	1	1.5
Selenium(mg/L)				0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.17	0.08	0.04	5	15
Total Chromium (mg/L)	0.06	0.09	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 251
Drinking Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Pit Top Tap Water

Project / OCP Monitoring Station	Nandira Colliery				Indian Drinking Standards (IS-10500):2012	
	Pit Top Tap Water				Acceptable	Permissible
Dt. of sampling	27.04.17	14-05-2017	15-06-2017	12-08-2017		
Colour(Hazen)	2	2	4	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	3	11	1	5
pH	7.24	7.54	7.51	7.03	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	12	16	12	200	600
Total Hardness(mg/L)	152	148	156	152	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.07	0.3	No relaxation
Chloride(mg/L)	20	18	20	12	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	348	302	310	290	500	2000
Calcium(mg/L)	36.8	33.6	36.8	36.8	75	200
Copper(mg/L)	0.06	0.05	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	110	88	82	104	200	400
Nitrate(mg/L)	5.76	5.43	5.76	4.43	45	No relaxation
Fluoride(mg/L)	0.26	0.27	0.55	0.69	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.05	0.02	0.13	0.03	5	15
Total Chromium (mg/L)			0.13	0.07	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 252
Drinking Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Pit Top Tap Water

Project / OCP	Nandira Colliery				Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Pit Top Tap Water					
Dt. of sampling	15-09-2017	14-10-2017	14-11-2017	14-12-2017	Acceptable	Permissible
Colour(Hazen)	2	2	5	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	3	1	4	1	5
pH	6.54	7.57	7.70	7.52	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	16	12	56	200	600
Total Hardness(mg/L)	168	188	152	160	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.11	0.3	No relaxation
Chloride(mg/L)	18	18	16	16	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0			0.2	1
Total Dissolve Solid(mg/L)	330	362	288	298	500	2000
Calcium(mg/L)	40	49.6	36.8	40	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	<0.02	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	104	110	88	108	200	400
Nitrate(mg/L)	5.47	4.76	<1	1.5	45	No relaxation
Fluoride(mg/L)	0.39	0.83	0.16	0.4	1	1.5
Selenium(mg/L)	<0.002	<0.002			0.01	No relaxation
Arsenic(mg/L)	<0.002	0.003		<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005		<0.005	0.01	No relaxation
Zinc(mg/L)	0.08	0.14	0.14	0.1	5	15
Total Chromium (mg/L)	0.06	<0.05	0.15	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2		<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005		<0.0005	0.003	No relaxation

Table: 253
Drinking Water Quality Data
Area: Talcher
Project: Nandira Colliery
Monitoring Station: Pit Top Tap Water

Project / OCP Monitoring Station	Nandira Colliery			Indian Drinking Standards (IS-10500):2012	
	Pit Top Tap Water				
Dt. of sampling	12-01-2018	15-02-2018	15.03.2018	Acceptable	Permissible
Colour(Hazen)	3	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	1	1	5
pH	7.50	7.96	7.71	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	60	68	68	200	600
Total Hardness(mg/L)	152	160	156	200	600
Iron(mg/L)	0.1	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	14	12	250	1000
Residual Free chlorine(mg/L)				0.2	1
Total Dissolve Solid(mg/L)	274	438	420	500	2000
Calcium(mg/L)	36.8	38.4	40	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	0.03	<0.02	0.1	0.3
Sulphate(mg/L)	70	68	96	200	400
Nitrate(mg/L)	1.20	2.67		45	No relaxation
Fluoride(mg/L)	0.54	0.68	0.61	1	1.5
Selenium(mg/L)				0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.12	0.1	0.05	5	15
Total Chromium (mg/L)	0.08	0.09	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 254
Drinking Water Quality Data
Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Deulbera Manager Office Tap Water

Project / OCP Monitoring Station	Deulbera Colliery				Indian Drinking Standards (IS-10500):2012	
	Deulbera Manager Office Tap Water				Acceptable	Permissible
Dt. of sampling	27.04.17	14-05-2017	15-06-2017	15-07-2017		
Colour(Hazen)	2	4	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	4	1	1	5
pH	7.48	7.51	7.39	7.22	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	12	8	12	200	600
Total Hardness(mg/L)	60	48	60	92	200	600
Iron(mg/L)	0.11	<0.06	<0.06	0.28	0.3	No relaxation
Chloride(mg/L)	26	16	14	38	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	166	110	112	210	500	2000
Calcium(mg/L)	12.8	11.2	14.4	20.8	75	200
Copper(mg/L)	0.05	0.04	<0.03	0.08	0.05	1.5
Manganese(mg/L)	0.02	<0.02	<0.02	0.12	0.1	0.3
Sulphate(mg/L)	12	7	8	54	200	400
Nitrate(mg/L)	2.17	2.43	2.07	3.78	45	No relaxation
Fluoride(mg/L)	0.38	0.52	0.63	0.48	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.12	0.1	<0.02	0.85	5	15
Total Chromium (mg/L)			0.14	43	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 255
Drinking Water Quality Data
Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Deulbera Manager Office Tap Water

Project / OCP Monitoring Station	Deulbera Colliery				Indian Drinking Standards (IS-10500):2012	
	Deulbera Manager Office Tap Water				Acceptable	Permissible
Dt. of sampling	12-08-2017	15-09-2017	13-10-2017	14-11-2017		
Colour(Hazen)	2	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	3	1	1	5
pH	7.28	6.67	7.65	7.92	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	8	8	12	8	200	600
Total Hardness(mg/L)	60	60	56	88	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	8	8	12	14	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0		0.2	1
Total Dissolve Solid(mg/L)	128	120	110	162	500	2000
Calcium(mg/L)	16	12.8	14.4	20.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.03	0.03	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	42	32	26	31	200	400
Nitrate(mg/L)	2.73	2.17	1.76	1.36	45	No relaxation
Fluoride(mg/L)	0.53	0.53	0.17	0.19	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002		0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	0.004		0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.18	0.01	No relaxation
Zinc(mg/L)	0.63	0.65	0.12	0.14	5	15
Total Chromium (mg/L)	0.07	0.05	<0.05		0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2		0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005		0.003	No relaxation

Table: 256
Drinking Water Quality Data
Area: Talcher
Project: Deulbera Colliery
Monitoring Station: Deulbera Manager Office Tap Water

Project / OCP Monitoring Station	Deulbera Colliery				Indian Drinking Standards (IS-10500):2012	
	Deulbera Manager Office Tap Water				Acceptable	Permissible
Dt. of sampling	14-12-2017	12-01-2018	15-02-2018	15.03.2018		
Colour(Hazen)	5	3	3	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	3	1	2	1	5
pH	7.64	7.60	7.65	7.76	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	44	40	44	40	200	600
Total Hardness(mg/L)	48	56	60	64	200	600
Iron(mg/L)	0.21	0.14	<0.06	0.07	0.3	No relaxation
Chloride(mg/L)	10	12	8	10	250	1000
Residual Free chlorine(mg/L)					0.2	1
Total Dissolve Solid(mg/L)	112	108	174	210	500	2000
Calcium(mg/L)	14.4	16	16	16	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.05	<0.02	0.1	0.3
Sulphate(mg/L)	8	11	14	12	200	400
Nitrate(mg/L)	0.8	2.87	1.83		45	No relaxation
Fluoride(mg/L)	0.36	0.39	0.84	0.38	1	1.5
Selenium(mg/L)					0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.16	0.12	0.16	0.05	5	15
Total Chromium (mg/L)	<0.05	0.07	0.09	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 257
Drinking Water Quality Data
Area: Talcher
Project: Handhidhua Colliery
Monitoring Station: Pit Top Tap Water

Project / OCP	Handhidhua Colliery				Indian Drinking Standards (IS-10500):2012	
	Pit Top Tap Water				Acceptable	Permissible
Monitoring Station	13-05-2017	15-06-2017	15/07/2017	12-08-2017		
Dt. of sampling	13-05-2017	15-06-2017	15/07/2017	12-08-2017	Acceptable	Permissible
Colour(Hazen)	4	2	4	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	8	1	5
pH	7.74	7.60	7.02	7.12	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	16	16	8	200	600
Total Hardness(mg/L)	152	148	140	64	200	600
Iron(mg/L)	<0.06	<0.06	0.22	<0.06	0.3	No relaxation
Chloride(mg/L)	40	34	16	8	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	328	306	330	132	500	2000
Calcium(mg/L)	40	38.4	38.4	14.4	75	200
Copper(mg/L)	0.03	0.05	0.045	0.03	0.05	1.5
Manganese(mg/L)	0.02	<0.02	0.09	0.06	0.1	0.3
Sulphate(mg/L)	81	74	82	44	200	400
Nitrate(mg/L)	4.76	4.76	6.76	3.48	45	No relaxation
Fluoride(mg/L)	0.56	0.64	0.53	0.39	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	0.021	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.08	<0.02	0.09	0.90	5	15
Total Chromium (mg/L)		0.12	0.41	0.09	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 258
Drinking Water Quality Data
Area: Talcher
Project: Handhidhua Colliery
Monitoring Station: Pit Top Tap Water

Project / OCP Monitoring Station	Handhidhua Colliery				Indian Drinking Standards (IS-10500):2012	
	Pit Top Tap Water				Acceptable	Permissible
Dt. of sampling	15-09-2017	13-10-2017	14-11-2017	14-12-2017		
Colour(Hazen)	2	3	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	2	2	1	1	5
pH	6.58	7.84	8.02	7.72	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	16	24	80	200	600
Total Hardness(mg/L)	152	156	904	156	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	38	34	46	36	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0			0.2	1
Total Dissolve Solid(mg/L)	308	302	1602	308	500	2000
Calcium(mg/L)	41.6	43.2	182.4	43.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	<0.02	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	70	52	388	64	200	400
Nitrate(mg/L)	4.76	5.47	1.39	2.5	45	No relaxation
Fluoride(mg/L)	0.47	0.28	0.14	0.55	1	1.5
Selenium(mg/L)	<0.002	<0.002			0.01	No relaxation
Arsenic(mg/L)	<0.002	0.003		<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.02	<0.005	0.01	No relaxation
Zinc(mg/L)	0.02	0.03	0.14	0.04	5	15
Total Chromium (mg/L)	0.15	<0.05		<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2		<0.2	0.5	1.0
Phenolics(mg/L)					0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005		<0.0005	0.003	No relaxation

Table: 259
Drinking Water Quality Data
Area: Talcher
Project: Handhidhua Colliery
Monitoring Station: Pit Top Tap Water

Project / OCP	Handhidhua Colliery			Indian Drinking Standards (IS-10500):2012	
	Pit Top Tap Water				
Monitoring Station					
Dt. of sampling	12-01-2018	15-02-2018	15.03.2018	Acceptable	Permissible
Colour(Hazen)	2	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	1	5
pH	7.65	7.78	7.48	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	72	72	68	200	600
Total Hardness(mg/L)	144	140	144	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	34	34	32	250	1000
Residual Free chlorine(mg/L)				0.2	1
Total Dissolve Solid(mg/L)	304	374	409	500	2000
Calcium(mg/L)	40	41.6	41.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.05	<0.02	0.1	0.3
Sulphate(mg/L)	62	52	69	200	400
Nitrate(mg/L)	2.86	2.37		45	No relaxation
Fluoride(mg/L)	0.36	0.44	0.29	1	1.5
Selenium(mg/L)				0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	<0.02	0.03	5	15
Total Chromium (mg/L)	0.07	0.1	<0.05	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Phenolics(mg/L)				0.001	0.002
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

TABLES FOR PIEZOMETER WATER QUALITY DATA

Table: 260

Project / OCP	Bhubaneswari OCP	Bhubaneswari OCP		
Monitoring Station	MTP 08:Inside Chakaddal high school (Ekdal village)	MTP 07:BCML workshop (near northern edge of Bhubaneswari OCP)	Indian Drinking Standards (IS-10500):2012	
Dt. of sampling	26.03.2018	26.03.2018	Acceptable	Permissible
Colour(Hazen)	70	58	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	47	17	1	5
pH	6.52	7.41	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	180	168	200	600
Total Hardness(mg/L)	232	148	200	600
Iron(mg/L)	0.18	0.15	0.3	No relaxation
Chloride(mg/L)	18	26	250	1000
Total Dissolve Solid(mg/L)	540	450	500	2000
Calcium(mg/L)	52.8	33.6	75	200
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.4	0.15	0.1	0.3
Sulphate(mg/L)	2	2	200	400
Fluoride(mg/L)	1.27	1.12	1	1.5
Arsenic(mg/L)	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.02	0.02	5	15
Total Chromium(mg/L)	<0.05	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation

Table: 261

Project / OCP	Bharatpur OCP	Ananta OCP	Ananta OCP		
Monitoring Station	MTP 09:Inside the premises of Joragarhia Panchayat high school	MTP 04:Inside central nursery (beside golf hut), Jagannath area	MTP 05:Outside Ananta OCP canteen	Indian Drinking Standards (IS-10500):2012	
Dt. of sampling	26.03.2018	25.03.2018	25.03.2018	Acceptable	Permissible
Colour(Hazen)	23	106	19	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	5	166	4	1	5
pH	8.40	6.50	8.46	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	184	44	28	200	600
Total Hardness(mg/L)	80	48	28	200	600
Iron(mg/L)	0.14	7.77	0.15	0.3	No relaxation
Chloride(mg/L)	52	12	14	250	1000
Total Dissolve Solid(mg/L)	390	210	120	500	2000
Calcium(mg/L)	6.4	14.4	8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.08	0.27	0.1	0.1	0.3
Sulphate(mg/L)	2	22.6	2	200	400
Fluoride(mg/L)	1.3	0.85	1.22	1	1.5
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.02	0.05	0.03	5	15
Total Chromium(mg/L)	<0.05	<0.05	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 262

Project / OCP	Chhendipada	Chhendipada	Chhendipada		
Monitoring Station	MTP 22: Inside the premises of the abundant office of Junior Engineer (MI Section, Chhendipada) (in the safety zone of Chhendipada OCP)	MTP 23: Inside the premises of Veterinary hospital, Chhendipada	MTP 21: Between Chhendipada weigh bridge and coal stock yard	Indian Drinking Standards (IS-10500):2012	
Dt. of sampling	27.03.2018	27.03.2018	27.03.2018	Acceptable	Permissible
Colour(Hazen)	149	40	103	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	57	5	36	1	5
pH	6.97	5.85	7.32	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	172	44	220	200	600
Total Hardness(mg/L)	228	180	336	200	600
Iron(mg/L)	0.27	2.83	0.32	0.3	No relaxation
Chloride(mg/L)	26	138	62	250	1000
Total Dissolve Solid(mg/L)	547	489	694	500	2000
Calcium(mg/L)	44.8	57.6	59.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.17	0.47	0.25	0.1	0.3
Sulphate(mg/L)	13.3	16.2	23.5	200	400
Fluoride(mg/L)	1.29	0.81	1.21	1	1.5
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.03	0.07	0.02	5	15
Total Chromium(mg/L)	<0.05	<0.05	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 263

Project / OCP	Lingraj OCP			Indian Drinking Standards (IS-10500):2012		
	Monitoring Station	MTP 01: Inside the premises of Mandapal hospital	MTP 02:Field workshop Lingaraj OCP (near field substation)	MTP 06:Inside the premises of Kandhal high school		
Dt. of sampling	15.03.2018	15.03.2018	26.03.2018	Acceptable	Permissible	
Colour(Hazen)	25	443	242	5	15	
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	
Turbidity(NTU)	4	81	149	1	5	
pH	7.56	6.94	6.50	6.5-8.5	No relaxation	
Total Alkalinity(mg/L)	112	108	128	200	600	
Total Hardness(mg/L)	204	128	168	200	600	
Iron(mg/L)	0.08	0.14	0.81	0.3	No relaxation	
Chloride(mg/L)	200	28	18	250	1000	
Total Dissolve Solid(mg/L)	592	364	430	500	2000	
Calcium(mg/L)	32	35.2	41.6	75	200	
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5	
Manganese(mg/L)	0.14	0.39	0.32	0.1	0.3	
Sulphate(mg/L)	2.4	3.6	4	200	400	
Fluoride(mg/L)	0.29	1.05	1.26	1	1.5	
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05	
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation	
Zinc(mg/L)	0.2	0.03	0.02	5	15	
Total Chromium(mg/L)	<0.05	<0.05	<0.05	0.05	No relaxation	
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0	
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation	

Table: 264

Project / OCP	Kaniha OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	MTP 18: Inside the premisses of Chellia Prathamiki school	MTP 19: Outside Golaghar sahi primary school, Bijigol (school constructed by NTPC)	MTP 20: Inside the premisses of Kansamunda village old site office, MCL	Acceptable
Dt. of sampling	27.03.2018	27.03.2018	27.03.2018	Acceptable	Permissible
Colour(Hazen)	61	33	74	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	12	6	19	1	5
pH	7.7	7.27	7.24	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	140	168	264	200	600
Total Hardness(mg/L)	132	268	292	200	600
Iron(mg/L)	0.1	0.26	0.18	0.3	No relaxation
Chloride(mg/L)	38	44	78	250	1000
Total Dissolve Solid(mg/L)	375	591	742	500	2000
Calcium(mg/L)	20.8	36.8	27.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.14	0.16	0.17	0.1	0.3
Sulphate(mg/L)	3.4	23.6	4	200	400
Fluoride(mg/L)	1.1	1.2	1.16	1	1.5
Arsenic(mg/L)	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.02	0.05	0.02	5	15
Total Chromium(mg/L)	<0.05	<0.05	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation

Table: 265

Project / OCP	Balram OCP				Indian Drinking Standards (IS-10500):2012	
	MTP 10: Inside the premises of Danara high school	MTP 12:In Betianalli village, opposite to Sindhu deori's house	MTP 13: Inside the premises of Ambapal Natarha high school	MTP 17: Inside the premises of market building (through gramin rojgar yojna), Kandhabherani village		
Dt. of sampling	26.03.2018	26.03.2018	26.03.2018	26.03.2018	Acceptable	Permissible
Colour(Hazen)	74	115	62	50	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	20	95	41	10	1	5
pH	6.11	6.03	5.83	6.38	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	44	32	100	200	600
Total Hardness(mg/L)	64	56	56	156	200	600
Iron(mg/L)	0.36	10.76	4.2	0.64	0.3	No relaxation
Chloride(mg/L)	26	14	18	42	250	1000
Total Dissolve Solid(mg/L)	210	210	189	410	500	2000
Calcium(mg/L)	22.4	11.2	14.4	35.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.2	0.8	0.47	0.32	0.1	0.3
Sulphate(mg/L)	2	9.3	16.6	6.8	200	400
Fluoride(mg/L)	0.67	0.51	1.07		1	1.5
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Zinc(mg/L)	0.12	0.03	0.03	0.02	5	15
Total Chromium(mg/L)	<0.05	<0.05	<0.05	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.005	0.003	No relaxation

Table: 266

Project / OCP	Hingula OCP			Indian Drinking Standards (IS-10500):2012	
	Monitoring Station	MTP 14: Inside the premises of Pirakhamam village primary school	MTP 15: Beside Sujan Pradhan's house in Chottaberani village, near nalla.		
Dt. of sampling	26.03.2018	26.03.2018	26.03.2018	Acceptable	Permissible
Colour(Hazen)	63	21	97	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	25	12	27	1	5
pH	5.89	7.70	7.75	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	32	140	156	200	600
Total Hardness(mg/L)	44	132	128	200	600
Iron(mg/L)	8.5	0.1	0.14	0.3	No relaxation
Chloride(mg/L)	16	38	46	250	1000
Total Dissolve Solid(mg/L)	186	375	450	500	2000
Calcium(mg/L)	14.4	20.8	25.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.25	0.14	0.1	0.1	0.3
Sulphate(mg/L)	2	3.4	3.5	200	400
Fluoride(mg/L)	<0.002	<0.002	0.49	1	1.5
Arsenic(mg/L)	<0.005	<0.005	<0.002	0.01	0.05
Lead(mg/L)	0.03	0.02	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.05	<0.05	<0.02	5	15
Total Chromium(mg/L)	<0.2	<0.2	<0.05	0.05	No relaxation
Boron(mg/L)	<0.0005	<0.0005	<0.2	0.5	1.0
Cadmium(mg/L)			<0.0005	0.003	No relaxation

Table: 267

Project / OCP	Handhidhua colliery		
Monitoring Station	MTP 03:Near Handidua level crossing	Indian Drinking Standards (IS-10500):2012	
Dt. of sampling	15.03.2018	Acceptable	Permissible
Colour(Hazen)	15	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	5
pH	8.30	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	64	200	600
Total Hardness(mg/L)	60	200	600
Iron(mg/L)	0.09	0.3	No relaxation
Chloride(mg/L)	26	250	1000
Total Dissolve Solid(mg/L)	256	500	2000
Calcium(mg/L)	6.4	75	200
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	0.09	0.1	0.3
Sulphate(mg/L)	2	200	400
Fluoride(mg/L)	0.59	1	1.5
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	<0.02	5	15
Total Chromium(mg/L)	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

Table: 268

Project / OCP	Nandira U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	MTP 11: Inside the premises of Hingula area office		
Dt. of sampling	26.03.2018	Acceptable	Permissible
Colour(Hazen)	319	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	68	1	5
pH	5.80	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	200	600
Total Hardness(mg/L)	32	200	600
Iron(mg/L)	7.96	0.3	No relaxation
Chloride(mg/L)	22	250	1000
Total Dissolve Solid(mg/L)	195	500	2000
Calcium(mg/L)	9.6	75	200
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	0.42	0.1	0.3
Sulphate(mg/L)	26	200	400
Fluoride(mg/L)	1.02	1	1.5
Arsenic(mg/L)	<0.002	0.01	0.05
Lead(mg/L)	<0.005	0.01	No relaxation
Zinc(mg/L)	0.07	5	15
Total Chromium(mg/L)	<0.05	0.05	No relaxation
Boron(mg/L)	<0.2	0.5	1.0
Cadmium(mg/L)	<0.0005	0.003	No relaxation

