Job No.750001

Annual Environmental Monitoring Report
Of

Talcher Coalfields

For

2016-17

Mahanadi Coalfields Limited

(A Subsidiary of Coal India Ltd.)

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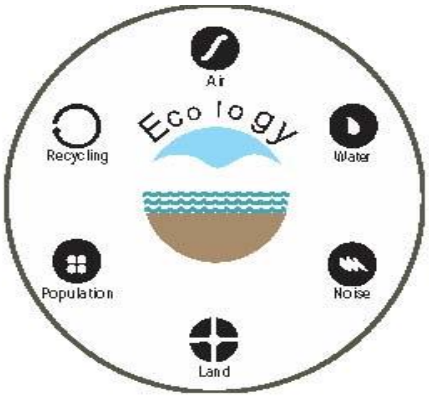

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INTRODUCTION

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 of endowed with a variety of mineral resources, coal being a major one. It has two important coafields 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 northsouth 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 part of the country, especially to southern and western India power houses. The coalfield is situated near Cuttack-Sambalpur railway line, which is linked to HowrahChennai 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.

Expansion Project report of 8.0 Mty for Jagannath OCP is being formulated.

To supply coal to Thermal Power Station (6x120mw) of NALCO, near Angul, Bharatpur OCP was opened in 1985. The project has now been expanded to 20.0 Mty.

To supply coal to Super Thermal Power Station of NTPC (6x500 MW) located at Kaniah, Lingaraj OCP (5 Mty) 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. The project has now been expanded to 16.0 Mty capacity.

Kalinga OCP (8 Mty) (now renamed as Balram OCP) was opened in 1991 to supply coal to North Madras and Tuticorin power houses by rail. The project has been expanded to 15.0 Mty and now the project is called Balram OCP.

Ananta opencast project (4 Mty) 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. The project has now been expanded to 15.0 Mty.

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 now mine is temporarily not in operation. Hingula OCP (2.0 Mty) was approved in 1999 to supply coal to Thermal Power Stations of Southern India. The project capacity has now been expanded to 15.0 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 Kaniah 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 $20^0$53' to $21^0$12' N and Longitude: 84^0 to $85^0$23'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 CuttackAngul- 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-ChhendipadaDeogarh 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. SambalpurTalcher 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 Bramhani 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 49^0C accompanied by high humidity. Winter is very pleasant, prevails during DecemberJanuary. The area experiences warm to hot climate with temperature varying from 9.9^0C to 44.4^0C. 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 1: List of Air Quality Monitoring Stations

Sl no	Area	OCP	Name of the station
1	Jagannath	Jagannath	Jagannath OCP-Time office (A1)
2			Jagannath colony (A2)
3			Near West Sump(A3)
4			Near view point (A4)*
5		Bhubaneswari	N-E of mine
6			S-E of mine
7			Raghunathpur village
8			B.C.M.L. Workshop
9	Bharatpur	Bharatpur	Near ETP
10			Nakeipasi Village- 13 parameters as per NAAQS including Hg
11			Near Civil maintenance office of Hingula Area
12			Regional store
13		Ananta	Ananta Expansion area (A1)
14			Near Talcher West underground (A2)
15			Near Ananta OC Project office(A3)
16			Ananta vihar colony
17		Chhendipada	Near site office
18			Near fire station
19			Mamuria sahi
20			Dolamandap chhak
21	Lingaraj	Lingaraj	Lingraj CGM Office
22			Near Shiva Temple
23			Near C.T.road (Lingraj to Dera)
24			Near Langijoda village
25	Kaniha	Kaniha	Project office
26			Telisingha village - (13 P) NAAQS including Hg
27			Patharmunda village - (13 P) NAAQS including Hg
28			Near Z-patch
29	Hingula	Hingula	Malibandha Village
30			Project Office
31			Bhalugadia Village
32			Gopal prasad village
33			Kumunda village
34		Balram	Natada Village
35			On backfilled area near dozer shed
36			Project Office, Balaram OCP**
37			Solada village
38	Talcher	Talcher	GM Office
39			Stores, Talcher Colliery
40			Near Gopinathpur village
41		Nandira	Project Office
42			Natedi Village

Table 2: List of Noise Level Monitoring Stations

Sl.No	Area	Project	Name of the Station
1	Jagannath	Jagannath	Jagannath OCP-Time office (A1)
2			Jagannath colony (A2)
3			Near West Sump(A3)
4			Near view point (A4)
5		Bhubaneswari	N-E of mine
6			S-E of mine
7			Raghunathpur village
8			B.C.M.L. Workshop
9	Bharatpur	Bharatpur	Near ETP
10			Nakeipasi village
11			Near Civil maintenance office of Hingula Area
12			Regional store
13		Ananta	Ananta Expansion area (A1)
14			Near Talcher West underground (A2)
15			Near Ananta OC Project office(A3)
17			Ananta vihar colony
18		chendipada	Near site office
19			Near Mine working
20			Near Weigh bridge
21	Lingaraj	Lingaraj	Lingraj CGM Office
22			Near Shiva Temple
23			Near C.T.road (Lingraj to Dera)
24			Near Langijoda village
25	Kaniha	Kaniha	Site office
26			Telisingha village
27			Patharmunda village
28			Near Jarda village
29	Hingula	Hingula	Malibandha Village
30			Project Office
31			Bhalugadia Village
32			Gopal prasad village
33			Kumunda village
34	Balaram	Balaram	Natada Village
35			On backfilled area near dozer shed
36			Project Office, Balaram OCP**
37			Solada village
38	Talcher colliery	Talcher	GM Office
39			Canteen, Talcher Colliery
40			Near Gopinathpur Village
41		Nandira	Project Office
42			Natedi Village
43		Deulbera	Manager's Office
44			Deulbera Colony

Table 3: List of Effluent (22 Parameter) Quality Monitoring Stations

S.NO	Area	OCP	NAME OF STATION
1	**Jagannath**	Jagannath	Mine disch. Water
2		Bhubaneswari	Mine disch. in Bangaru jhor
3	**Bharatpur**	Bharatpur	Mine disch.before pt.of confl.with Bangaru nulla
4		Ananta	Mine disch. Water
5		Chhendipada	Mine discharge water
6	**Lingaraj**	Lingaraj	Outlet of MDTP
7			Lingraj mine disch./Outlet of O&G trap at confl.pt.of Brahmani river
8	**Kaniha**	Kaniha	Kaniha mine discharge, when disch. will come
9	**Hingula**	Hingula	Final disch. Point
10		Balram	Mine Discharge Water
11	**Talcher**	Talcher	Talcher colliery mine discharge
12			Nandira colliery mine discharge
13			Deulbera colliery mine discharge
14			Rani park Submersible pump
15			Handhidhua Colliery mine discharge
16			Up stream side (at a distance of 200 m)
17			Down stream side (at a distance of 200 m)

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

S.NO	Area	OCP	NAME OF STATION
1	Jagannath	Jagannath	O & G trap outlet, JNC
2			MDTP/ STP Outlet
3		Bhubaneswari	Mine discharge water
4	Bharatpur	Bharatpur	Mine discharge at point of confluence with Bangaru Nulla
5			O & G trap outlet
6		Ananta	Mine discharge water
7			O & G trap outlet
8			O&G trap inlet (half yrly)
9	Lingaraj	Lingaraj	outlet of MDTP (5p)
10			Outlet of O&G trap (5p)
11	Kaniha	Kaniha	outlet of MDTP
12	Hingula	Hingula	mine discharge water
13			discharge point at north of mine into singhda jhor
14			O & G trap outlet
15		Balram	mine Sump water
16			Bangaru Nallah/Jhor water near balaram OCP
17			O& G outlet
18			O& G Inlet
19	Talcher	Talcher	Talcher colliery sedimentation tank discharge
20			Nandira colliery sedimentation tank discharge
21			Duelbera colliery mine discharge
22			Ranipark submersible pump
23			Handhidhua Colliery mine discharge
24			Up stream side (at a distance of 200 m)
25			Down stream side (at a distance of 200 m)

Table 5: List of Effluent (3 Parameter) Quality Monitoring Stations

S.NO	Area	OCP	NAME OF STATION
1	Jagannath	Jagannath	DETP/STP OUTLET
2	Bharatpur	Bharatpur	DETP/STP OUTLET
3			DETP/STP INLET
4		Ananta	DETP/STP OUTLET
5			DETP/STP INLET
6	Hingula	Hingula	Mine sump water
7	Hingula	Hingula	Inlet of O & G trap
8	Hingula	Balram	DETP/STP OUTLET of Balram colony

Table 6: List of Effluent (1 Parameter) Quality Monitoring Stations

S.NO	Area	OCP	NAME OF STATION
1	Bharatpur	Ananta	Mine sump water
2	Lingaraj	Lingaraj OCP	Mine sump water

Table 7: List of Drinking Water Quality Monitoring Stations

S.NO	Area	OCP	NAME OF STATION
1	Jagannath	Jagannath OCP	Rakas vill. Well water (monthly)
2			Balanda colony tap water (qrly.)
3			Jagannath Colony tap water (monthly)
4		Bhubaneswari OCP	Project site office water
5			Naraharipur village Tube well water
6			Jilinda village Well water
7	Bharatpur	Bharatpur OCP	Tap water in Nehru Satabdi nagar (in alternate month)
8			Badasinga village
9			Time office, BOCP
10		Ananta OCP	Ananta colony tap water (qrly.in May, August, Nov., Feb.)
11			Hensmul village Well water
12			Dera village Tube well water
13		Chhendipada	Bore well water at site office
14	Lingraj	Lingraj OCP	MTK office tap water, LOCP
15			Lingaraj township tap water
16			Tap water GM Office
17			Deulbera colony tap water
18			well from Balunga khamar village
19			well from Deulbera Village
20			well from Talabera village
21	Kaniha	Kaniha OCP	Project office / Site office tube well water
22			Jarda village well water
23			Jamunia village well water
24			Kansamunda village well water
25	Hingula	Hingula OCP	Time office water
26			Gopalprasad village bore well water
27			Kumunda village bore well water
28		Balaram Ocp	Danara village borewell water(qrly.in May, August, Nov,Jan.)
29			Balaram Colony tap water
30			Nakeiposi Village borewell water(qrly.in May, August, Nov, Jan.)
31	Talcher U/G	Talcher U/G	canteen tap-water, Talcher colliery
32			Talcher colliery canteen tap-water, GM office
33		Nandira U/G	canteen tap-water, Nandira colliery
34			Pit top tap water. Nandira colliery
35		Deulbera U/G	Deulbera manager office tap water

Table 8: List of Ground Water Level Stations

Sl no	Area	OCP	Name of the station
1	Jagannath	Jagannath	Rakas Village Well
2		Bhubaneswari	Jilinda village Well
3			Naraharipur village Well
4	Bharatpur	Ananta	Dera Village Well
5			Hensmul Village Well
6	Lingraj	Lingraj	Deulbera colony tap water
7			Balunga khamar Village Well
8			Tap water GM office
9			Lingaraj Township tap water
10	Kaniha	Kaniha	Jarda Village Well
11			Jamunia vill. Well
12			Kansamunda Village Well
13	Hingula	Hingula	Kusumpal Village Well near OB dump
14			Gopalprasad village well water
15		Balram	Danara Village Well
16			Nakeipasi Village Well
17	Talcher	Talcher	Naraharipur Village Well
18			Natedi Village Well
19			Deulbera colony well

Table 9: List of Surface Water Monitoring Stations

Slno	Area	OCP	NAME OF STATION
1	Jagannath	Bhubaneswari	Bangarujhor stream near Sareila/Khaisa pala village as d/s water of Bhubaneswari OCP before joining Brahmani river
2			Pond water of Madanmohanpur
3	Bharatpur	Bharatpur	Bangarujhor river near Telepasi/Solada village as u/s water of Bharathpur OCP
4		Ananta	Bangaru jhor river near Joragarhia/Banapalli as u/s water of point of confluence of Ananta OCP
5			Bangarujhor river near Raghunathpur/Jilinda village as d/s water of Ananta OCP
6	Lingraj	Lingraj	Village pond near Deulbera siding
7	Kaniha	Kaniha	Singada jhor stream nearer to village Khairnali/ Bhagirathipur as u/s water for Kaniha OCP
8			Before Junction point of Singadajhor & Brahmani river at Balangi village as d/s for Kaniha OCP
9			Tikra nadi near Kaniah village as u/s water for Kaniah OCP
10			Tikra nadi near Shagarhi Pala village as d/s water for Kaniah OCP
11	Hingula	Hingula	Singadhajhor stream nearer to village Chhotabani as u/s water for Hingula OCP
12			Singadhajhor stream nearer to village Chittalpur as d/s water for Hingula OCP
13			Pond water of Kankarei village
14		Balaram	Derjenga reservoir as a part of impact study
15			Pond water of Ambapal village
16	Talcher	Talcher	Nandira Jhor near Karnapur/ Sakasingha village as u/s of Nandira U/G mine
17			Nandira Jhor near Tentolei/ Pengua village as d/s of Nandira U/G mine
18			Pond water of Dera village
19			Pond water of Gopinathpur village

FREQUENCY OF MONITORING

Table 10: 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.	Ground Water Level Monitoring	Quarterly
8.	Surface Water (21 Parameter) Quality Monitoring	Quarterly

METHODOLOGY AND INSTRUMENTS USED

Table 11: 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.	SO2	IS:5182 (Part-2):2001, Improved West and Gaeke Method	Spectrophotometer, Respirable Dust Sampler with Impinger Box
4.	NOX	IS:5182 (Part-6):2006, Jacob & Hoccheiser Modified Method	Spectrophotometer, Respirable Dust Sampler with Impinger Box

Table 12: Methodology & Instruments used for Noise level Monitoring

Sl. No.	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 :1
Project: Jagannath OCP
Monitoring Station: Jagannath Colony(A2)

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
09-06-2016	64	95	<25	11	178	West to East Sunny
24-06-2016	51	138	<25	<6	251	West to East Sunny
07-07-2016	52	118	4	8	244	West to east sunny and rainfall
22-07-2016	44	90	14	19	143	East to west cloudy and rainfall
12-08-2016	30	51	7	9	81	North to South Rainfall
25-08-2016	54	168	4	<6	236	South to north Sunny & Evening Rainfall
14-09-2016	28	98	19	17	146	East to west cloudy & evening rainfall
27-09-2016	18	98	10	<6	152	West to East cloudy & evening rainfall
14-10-2016	78	230	3	<6	348	East to west Sunny
26-10-2016	68	258	29	36	496	East to west Sunny
09-11-2016	48	248	18	<6	352	North East to South West, Sunny
28-11-2016	54	224	33	21	428	West to East, Sunny & Cloudy
13-12-2016	117	222	11	14	358	East to West, Sunny
27-12-2016	154	298	8	12	426	East to North, Sunny
10-01-2017	71	154	9	10	271	South to North Cloudy
24-01-2017	147	340	34	17	497	East to South, Sunny
14-02-2017	136	141	6	12	371	South to North Sunny
27-02-2017	79	190	3	14	298	East to West, Sunny
10-03-2017	50	58	3.06	8	83	East to West, Rainfall
27-03-2017	32	89	8.49	9	207	North to South, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**154**	**340**	**34**	**36**	**497**	
Minimum	**18.00**	**51.00**	**3.00**	**8.00**	**81.00**	
Average	**68.75**	**165.40**	**12.42**	**14.47**	**278.30**	
95 Percentile	**147.35**	**300.10**	**33.15**	**25.50**	**496.05**	
98 Percentile	**151.34**	**324.04**	**33.66**	**31.80**	**496.62**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :2
Project: Jagannath OCP
Monitoring Station: Near West sump (A3)

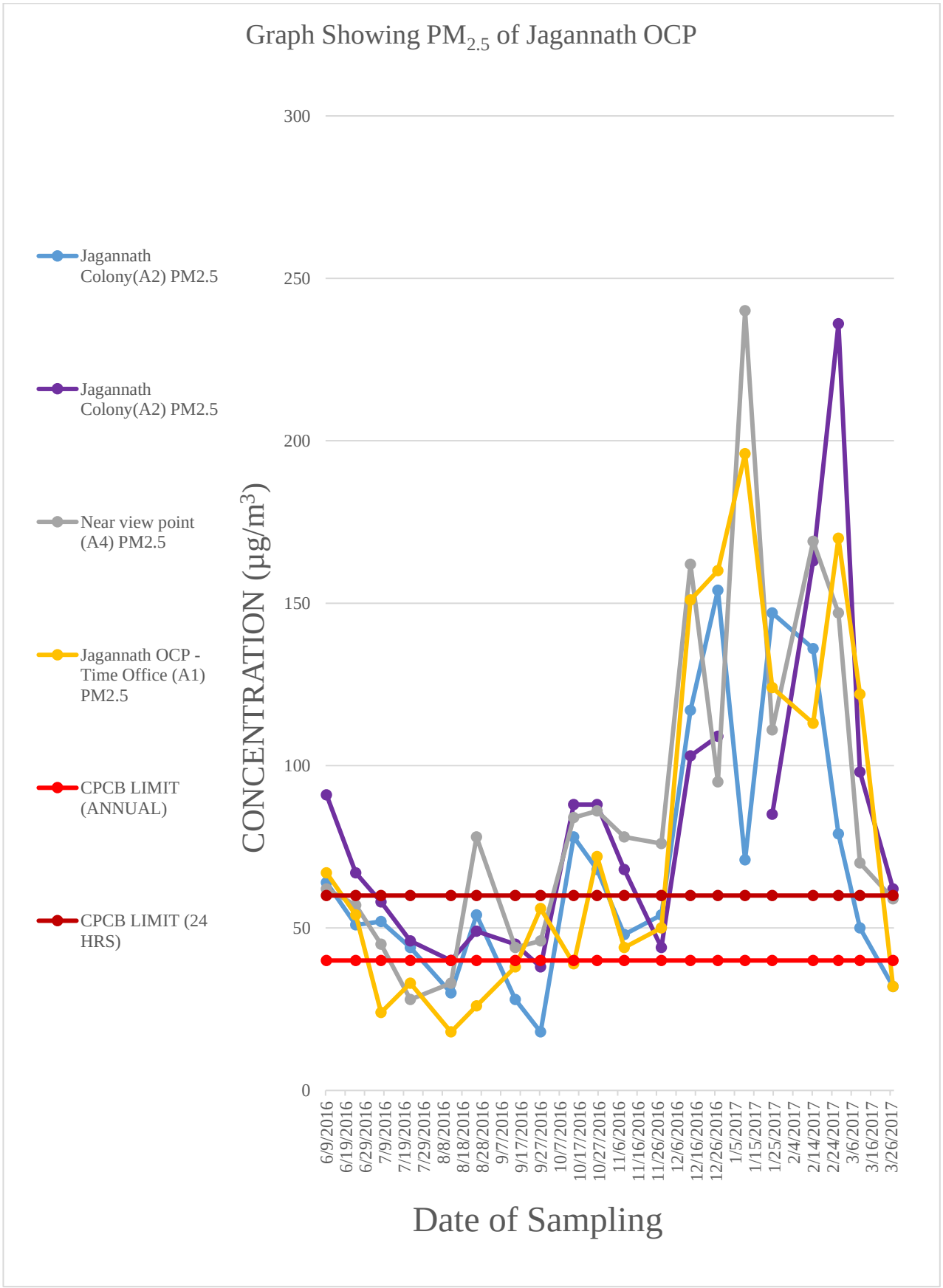
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
09-06-2016	91	229	<25	7	425	West to East Sunny
24-06-2016	67	195	<25	<6	366	West to East Sunny
07-07-2016	58	138	16	9	296	West to east sunny and rainfall
22-07-2016	46	176	15	21	221	East to west cloudy and rainfall
12-08-2016	40	95	35	14	152	North to South Rainfall
25-08-2016	49	118	7	6	172	South to north Sunny & Evening Rainfall
14-09-2016	45	230	14	12	380	East to west cloudy & evening rainfall
27-09-2016	38	138	9	7	212	West to East cloudy & evening rainfall
14-10-2016	88	368	7	<6	762	East to west Sunny
26-10-2016	88	342	28	35	728	East to west Sunny
09-11-2016	68	314	17	19	652	North East to South West, Sunny
28-11-2016	44	274	24	9	382	West to East, Sunny & Cloudy
13-12-2016	103	304	15	17	584	East to West, Sunny
27-12-2016	109	185	17	19	374	East to North, Sunny
10-01-2017		451	20	9	845	South to North Cloudy & PM2.5 Sampler Break Down
24-01-2017	85	499	14	34	651	East to South, Sunny
14-02-2017	163	559	25	28	921	South to North Sunny
27-02-2017	236	658	2	17	1044	East to West, Sunny
10-03-2017	98	174	48.91	6	302	East to West, Rainfall
27-03-2017	62	349	22.8	8	709	North to South, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**236**	**658**	**48.91**	**35**	**1044**	
Minimum	**38.00**	**95.00**	**2.00**	**6.00**	**152.00**	
Average	**83.05**	**289.80**	**18.71**	**15.39**	**508.90**	
95 Percentile	**170.30**	**563.95**	**37.09**	**34.15**	**927.15**	
98 Percentile	**209.72**	**620.38**	**44.18**	**34.66**	**997.26**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

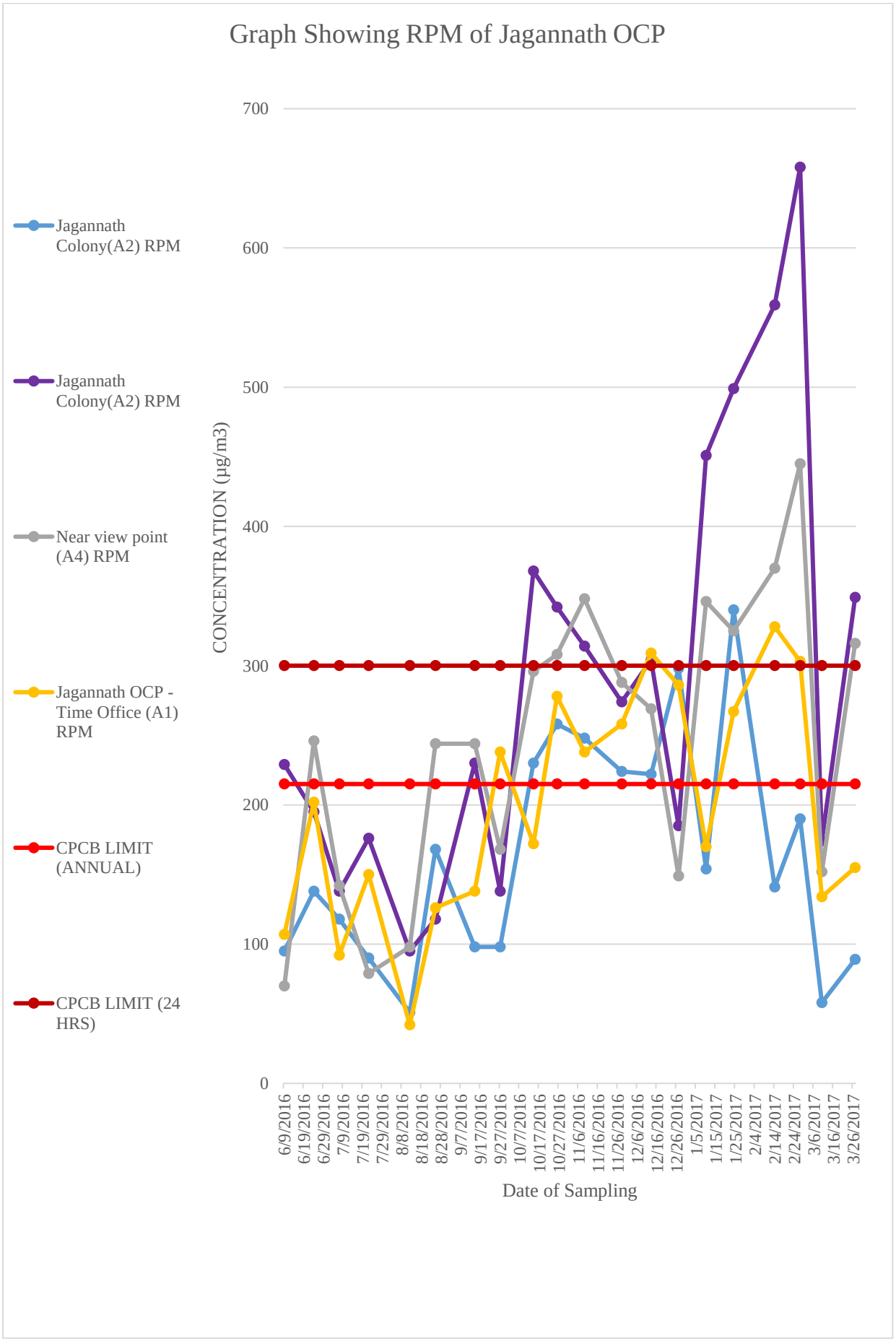
Table :3
Project: Jagannath OCP
Monitoring Station: Near view point (A4)

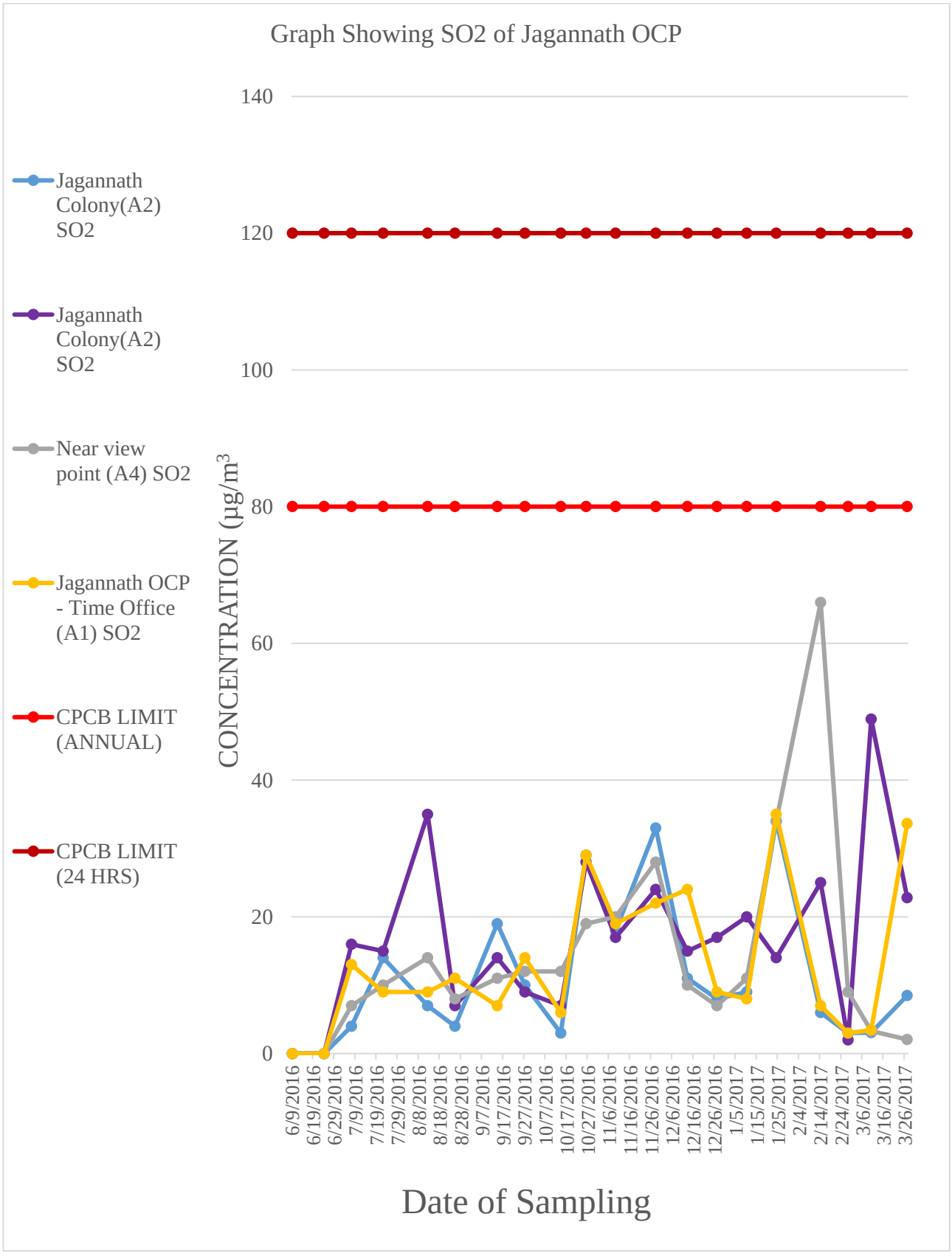
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
09-06-2016	62	70	<25	6	144	West to East Sunny
24-06-2016	57	246	<25	<6	450	West to East Sunny
07-07-2016	45	142	7	13	280	West to east sunny and rainfall
22-07-2016	28	79	10	6	138	East to west cloudy and rainfall
12-08-2016	33	98	14	10	144	North to South Rainfall
25-08-2016	78	244	8	6	366	South to north Sunny & Evening Rainfall
14-09-2016	44	244	11	<6	362	East to west cloudy & evening rainfall
27-09-2016	46	168	12	8	234	West to East cloudy & evening rainfall
14-10-2016	84	296	12	6	534	East to west Sunny
26-10-2016	86	308	19	24	576	East to west Sunny
09-11-2016	78	348	20	17	564	North East to South West, Sunny
28-11-2016	76	288	28	36	586	West to East, Sunny & Cloudy
13-12-2016	162	269	10	<6	573	East to West, Sunny
28-12-2016	95	149	7	10	230	East to North, Sunny
10-01-2017	240	346	11	14	489	South to North Cloudy
24-01-2017	111	325	34	19	658	East to South, Sunny
14-02-2017	169	370	66	9	649	South to North Sunny
27-02-2017	147	445	9	17	964	East to West, Sunny
10-03-2017	70	152	3.31	6	195	East to West, Rainfall
27-03-2017	59	316	2.06	9	556	North to South, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**240**	**445**	**66**	**36**	**964**	
Minimum	**28.00**	**70.00**	**2.06**	**6.00**	**138.00**	
Average	**88.50**	**245.15**	**15.74**	**12.71**	**434.60**	
95 Percentile	**172.55**	**373.75**	**38.80**	**26.40**	**673.30**	
98 Percentile	**213.02**	**416.50**	**55.12**	**32.16**	**847.72**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

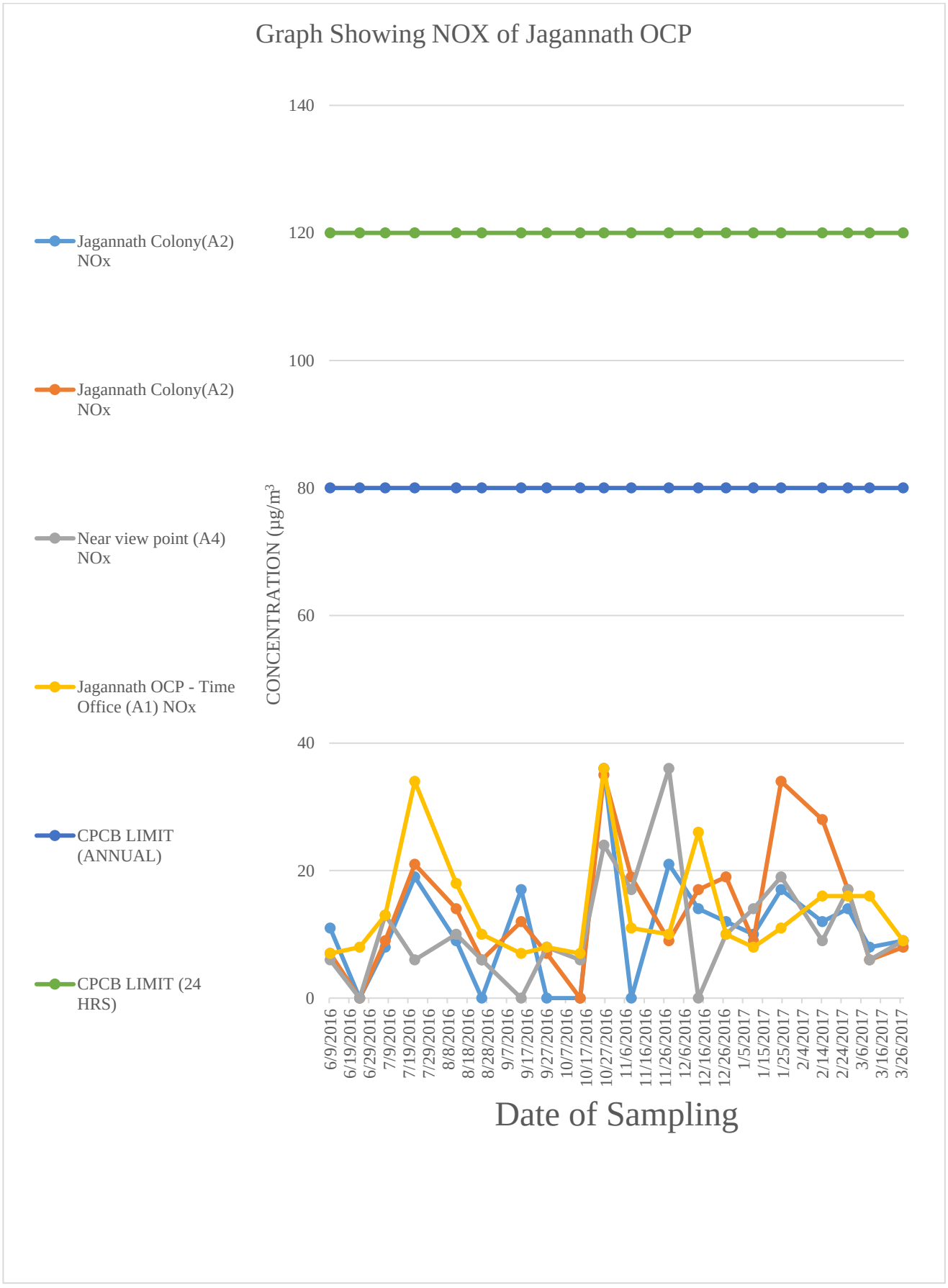
Table :4
Project: Jagannath OCP
Monitoring Station: Jagannath OCP - Time Office (A1)

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
09-06-2016	67	107	<25	7	185	West to East Sunny
24-06-2016	54	202	<25	8	456	West to East Sunny
07-07-2016	24	92	13	13	210	West to east sunny and rainfall
22-07-2016	33	150	9	34	226	East to west cloudy and rainfall
12-08-2016	18	42	9	18	66	North to South Rainfall
25-08-2016	26	126	11	10	232	South to north Sunny & Evening Rainfall
14-09-2016	38	138	7	7	226	East to west cloudy & evening rainfall
27-09-2016	56	238	14	8	356	West to East cloudy & evening rainfall
14-10-2016	39	172	6	7	266	East to west Sunny
26-10-2016	72	278	29	36	602	East to west Sunny
09-11-2016	44	238	19	11	374	North East to South West, Sunny
28-11-2016	50	258	22	10	466	West to East, Sunny & Cloudy
13-12-2016	151	309	24	26	432	East to West, Sunny
27-12-2016	160	286	9	10	413	East to North, Sunny
10-01-2017	196	170	8	8	327	South to North Cloudy
24-01-2017	124	267	35	11	417	East to South, Sunny
14-02-2017	113	328	7	16	472	South to North Sunny
27-02-2017	170	303	3	16	683	East to West, Sunny
10-03-2017	122	134	3.43	16	188	East to West, Rainfall
27-03-2017	32	155	33.65	9	326	North to South, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**196**	**328**	**35**	**36**	**683**	
Minimum	**18.00**	**42.00**	**3.00**	**7.00**	**66.00**	
Average	**79.45**	**199.65**	**14.56**	**14.05**	**346.15**	
95 Percentile	**171.30**	**309.95**	**33.85**	**34.10**	**606.05**	
98 Percentile	**186.12**	**320.78**	**34.54**	**35.24**	**652.22**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing $PM_{2.5}$ of Jagannath OCP
Jagannath Colony(A2) PM2.5
Jagannath Colony(A2) PM2.5
Near view point (A4) PM2.5
Jagannath OCP - Time Office (A1) PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
300
250
200
150
100
50
0
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling


Graph Showing RPM of Jagannath OCP
Jagannath Colony(A2) RPM
Jagannath Colony(A2) RPM
Near view point (A4) RPM
Jagannath OCP - Time Office (A1) RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
700
600
500
400
300
200
100
0
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling


Graph Showing SO2 of Jagannath OCP
Jagannath Colony(A2) SO2
Jagannath Colony(A2) SO2
Near view point (A4) SO2
Jagannath OCP - Time Office (A1) SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling


Graph Showing NOX of Jagannath OCP
Jagannath Colony(A2) NOx
Jagannath Colony(A2) NOx
Near view point (A4) NOx
Jagannath OCP - Time Office (A1) NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling

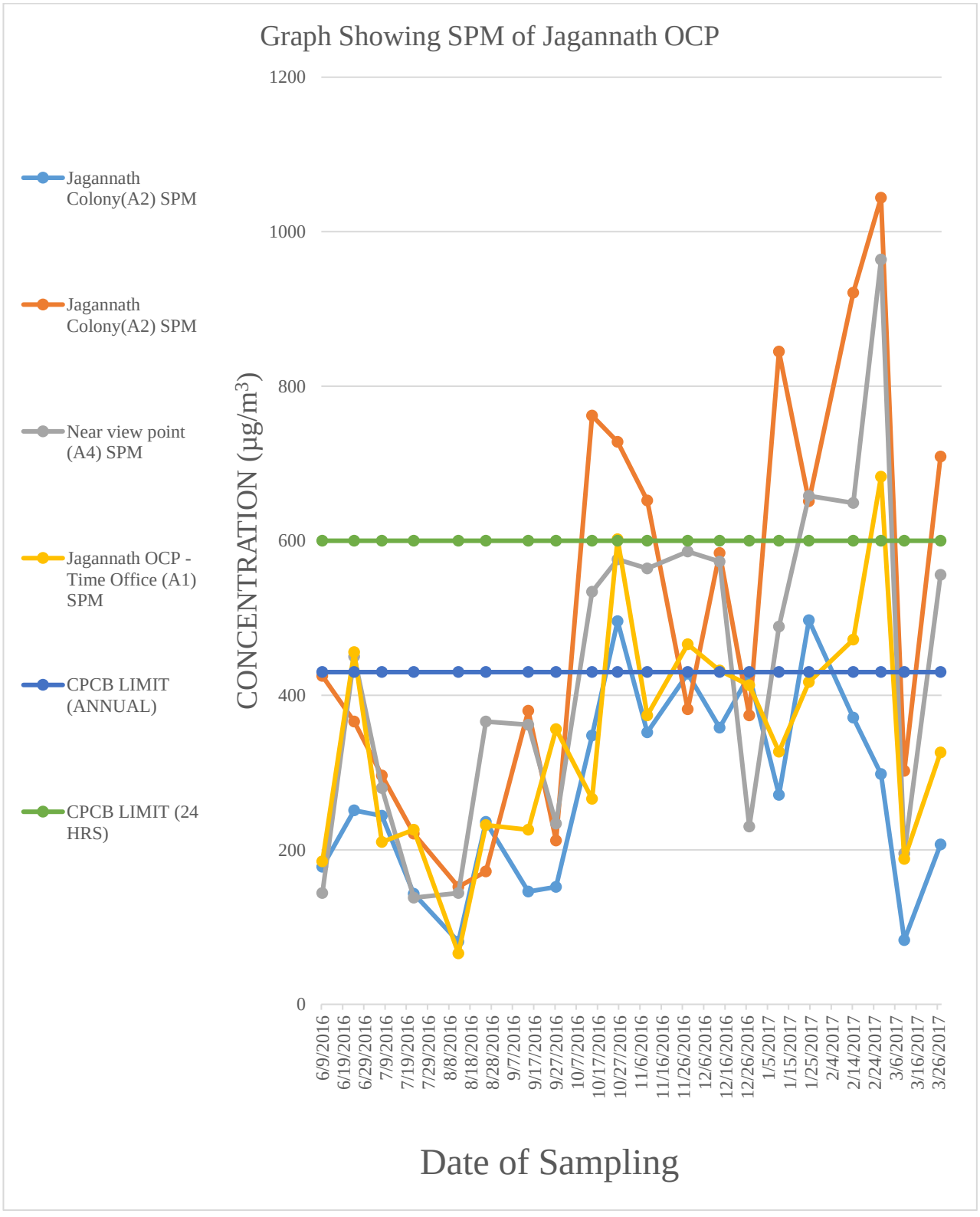

Graph Showing SPM of Jagannath OCP
Jagannath Colony(A2) SPM
Jagannath Colony(A2) SPM
Near view point (A4) SPM
Jagannath OCP - Time Office (A1) SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
1200
1000
800
600
400
200
0
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling

Table :5
Project: Bhubaneswari OCP
Monitoring Station: B.C.M.L.Workshop

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
07-06-2016	67	185	<25	8	327	West to East Sunny
22-06-2016	65	276	<25	11	425	East to west sunny
12-07-2016	22	86	6	8	160	West to east sunny and rainfall
27-07-2016	33	96	28	<6	148	South to north cloudy
09-08-2016	13	43	11	32	60	East to west rainfall
22-08-2016	66	112	3	<6	186	East to west Sunny & Evening Rainfall
09-09-2016	34	164	7	6	242	East to west cloudy
22-09-2016	14	58	7	<6	86	West to East cloudy & evening rainfall
13-10-2016	22	98	4	9	158	West to East Sunny
24-10-2016	34	126	10	<6	228	East to west Sunny
11-11-2016	34	179	6	17	255	North East to South West, Sunny
24-11-2016	46	234	19	17	372	East to West, Cloudy
09-12-2016	72	186	9	<6	257	West to East, Sunny
26-12-2016	113	150	10	<6	191	South to West, Sunny
06-01-2017	68	184	15	12	295	South to North Sunny
20-01-2017	62	167	8	7	307	East to South, Sunny
09-02-2017	221	239	15	9	499	South to West Sunny
24-02-2017	140	167	21	23	272	North to South, Sunny
09-03-2017	74	157	3.56	16	407	East to West, Rainfall
24-03-2017	35	378	8.91	9	598	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**221**	**378**	**28**	**32**	**598**	
Minimum	**13.00**	**43.00**	**3.00**	**6.00**	**60.00**	
Average	**61.75**	**164.25**	**10.64**	**13.14**	**273.65**	
95 Percentile	**144.05**	**281.10**	**22.05**	**26.15**	**503.95**	
98 Percentile	**190.22**	**339.24**	**25.62**	**29.66**	**560.38**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :6
Project: Bhubaneswari OCP
Monitoring Station: S-E of Mine

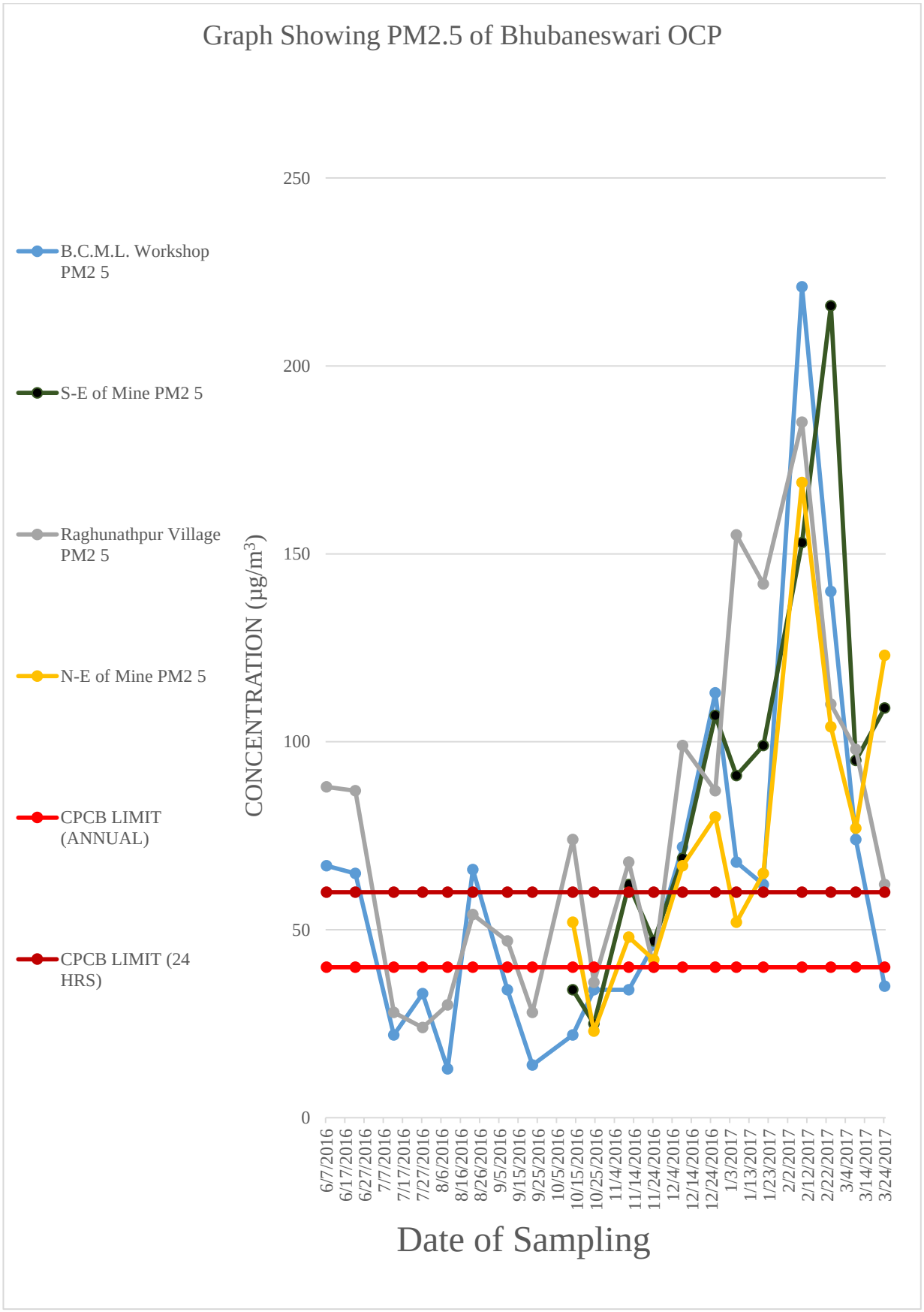
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
13-10-2016	34	258	10	7	396	West to East Sunny
24-10-2016	25	168	12	15	286	East to west Sunny
11-11-2016	62	248	24	31	386	North East to South West, Sunny
24-11-2016	47	228	14	20	406	East to West, Cloudy
09-12-2016	69	188	10	14	335	West to East, Sunny
26-12-2016	107	245	15	8	294	South to West, Sunny
06-01-2017	91	362	11	16	617	South to North Sunny
20-01-2017	99	359	19	15	614	East to South, Sunny
09-02-2017	153	238	33	13	488	South to West Sunny
24-02-2017	216	381	13	15	839	North to South, Sunny
09-03-2017	95	102	4.22	8	550	East to West, Rainfall
25-03-2017	109	378	5.73	7	497	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	216	381	33	31	839	
Minimum	25.00	102.00	4.22	7.00	286.00	
Average	92.25	262.92	14.25	14.08	475.67	
95 Percentile	181.35	379.35	28.05	24.95	716.90	
98 Percentile	202.14	380.34	31.02	28.58	790.16	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

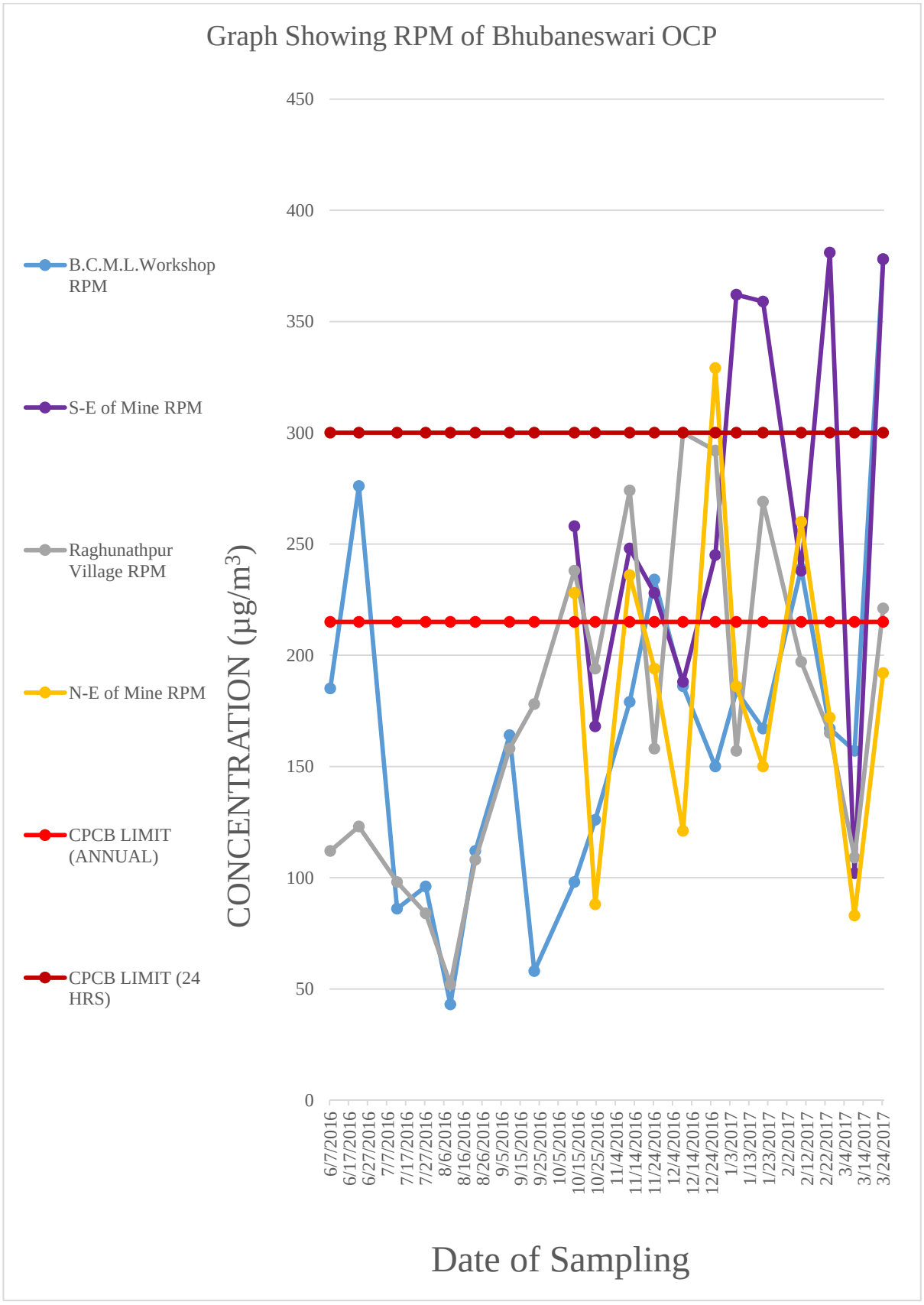
Table :7
Project: Bhubaneswari OCP
Monitoring Station: Raghunathpur Village

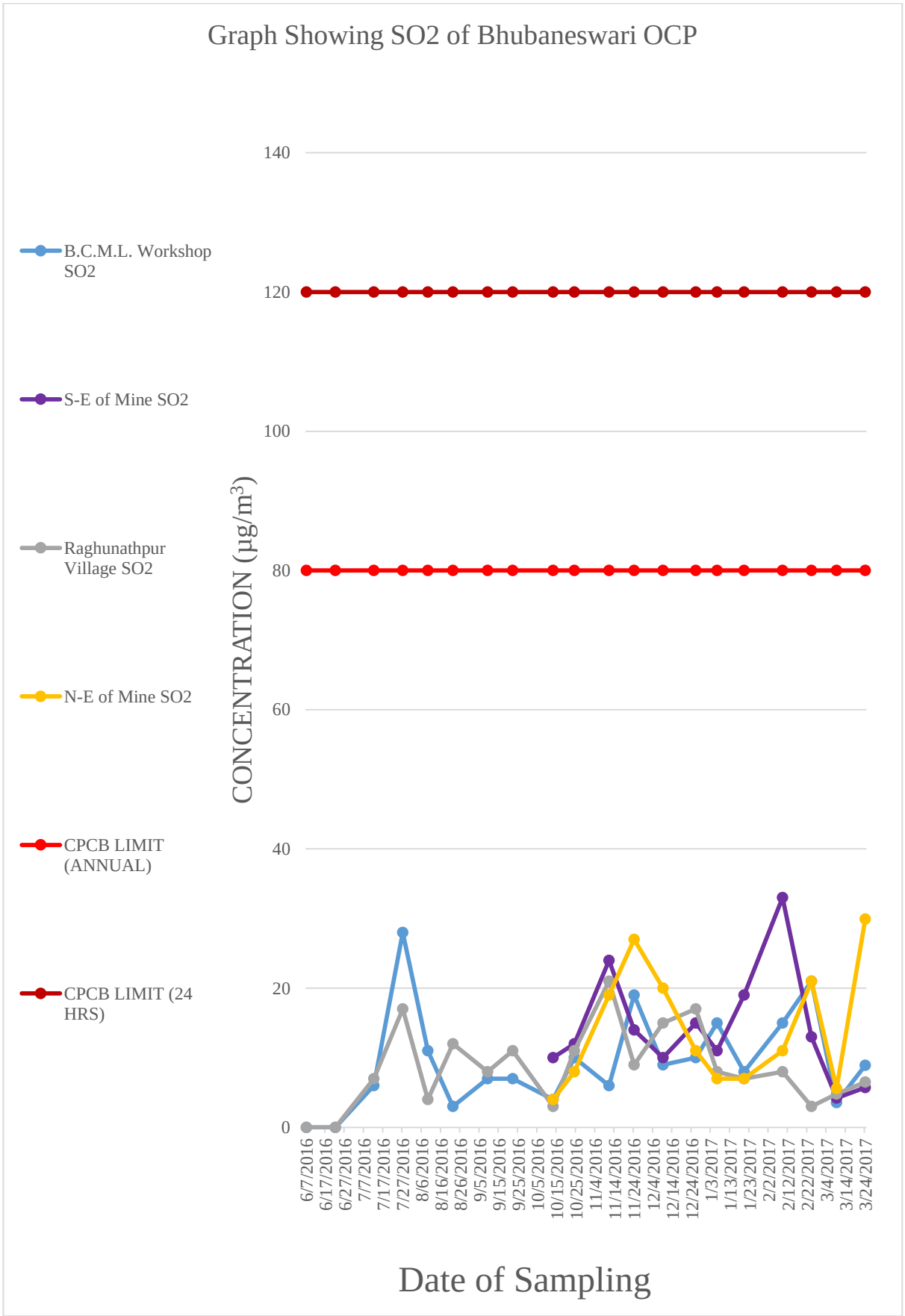
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
07-06-2016	88	112	<25	16	154	West to East Sunny
22-06-2016	87	123	<25	7	251	East to west sunny
12-07-2016	28	98	7	8	215	West to east sunny and rainfall
27-07-2016	24	84	17	6	113	South to north cloudy
09-08-2016	30	52	4	9	74	East to west rainfall
22-08-2016	54	108	12	6	184	East to west Sunny & Evening Rainfall
09-09-2016	47	158	8	<6	256	East to west cloudy
22-09-2016	28	178	11	9	256	West to East cloudy & evening rainfall
13-10-2016	74	238	3	<6	350	West to East Sunny
24-10-2016	36	194	11	16	274	East to west Sunny
11-11-2016	68	274	21	32	513	North East to South West, Sunny
24-11-2016	40	158	9	<6	266	East to West, Cloudy
09-12-2016	99	300	15	12	463	West to East, Sunny
26-12-2016	87	292	17	19	411	South to West, Sunny
06-01-2017	155	157	8	15	278	South to North Sunny
20-01-2017	142	269	7	15	470	East to South, Sunny
09-02-2017	185	197	8	18	412	South to West Sunny
24-02-2017	110	165	3	9	306	North to South, Sunny
09-03-2017	98	109	4.8	24	270	East to West, Rainfall
24-03-2017	62	221	6.52	9	379	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**185**	**300**	**21**	**32**	**513**	
Minimum	**24.00**	**52.00**	**3.00**	**6.00**	**74.00**	
Average	**77.10**	**174.35**	**9.57**	**13.53**	**294.75**	
95 Percentile	**156.50**	**292.40**	**17.60**	**25.60**	**472.15**	
98 Percentile	**173.60**	**296.96**	**19.64**	**29.44**	**496.66**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

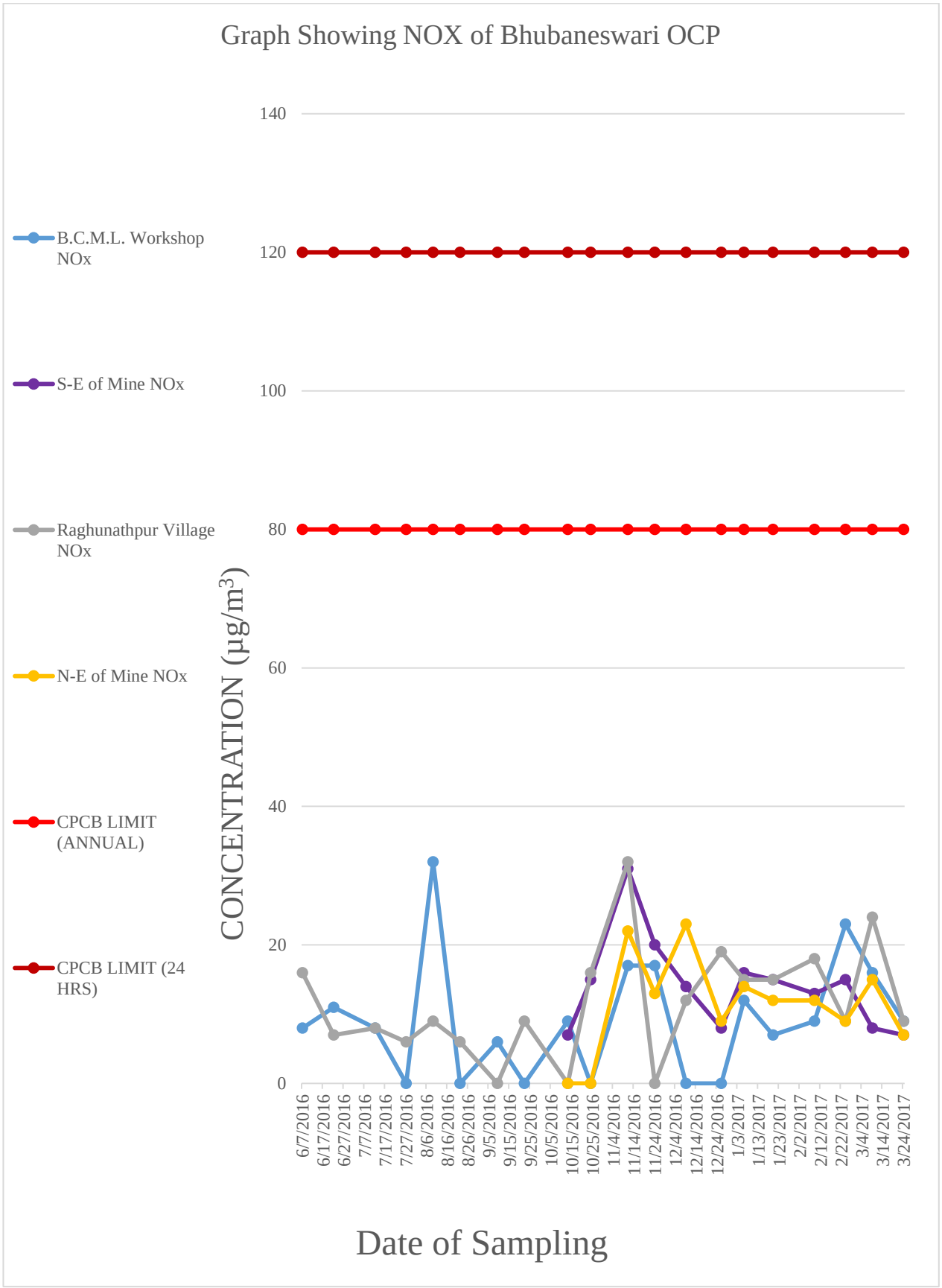
Table :8
Project: Bhubaneswari OCP
Monitoring Station: N-E of Mine

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
13-10-2016	52	228	4	<6	358	West to East Sunny
24-10-2016	23	88	8	<6	156	East to west Sunny
11-11-2016	48	236	19	22	426	North East to South West, Sunny
24-11-2016	42	194	27	13	354	East to West, Cloudy
09-12-2016	67	121	20	23	240	West to East, Sunny
26-12-2016	80	329	11	9	510	South to West, Sunny
06-01-2017	52	186	7	14	311	South to North Sunny
20-01-2017	65	150	7	12	220	East to South, Sunny
09-02-2017	169	260	11	12	396	South to West Sunny
24-02-2017	104	172	21	9	221	North to South, Sunny
09-03-2017	77	83	5.57	15	153	East to West, Rainfall
25-03-2017	123	192	29.93	7	276	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**169**	**329**	**29.93**	**23**	**510**	
Minimum	**23.00**	**83.00**	**4.00**	**7.00**	**153.00**	
Average	**75.17**	**186.58**	**14.21**	**13.60**	**301.75**	
95 Percentile	**143.70**	**291.05**	**28.32**	**22.55**	**463.80**	
98 Percentile	**158.88**	**313.82**	**29.29**	**22.82**	**491.52**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing PM2.5 of Bhubaneswari OCP
B.C.M.L. Workshop PM2 5
S-E of Mine PM2 5
Raghunathpur Village PM2 5
N-E of Mine PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
250
200
150
100
50
0
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling


Graph Showing RPM of Bhubaneswari OCP
B.C.M.L.Workshop RPM
S-E of Mine RPM
Raghunathpur Village RPM
N-E of Mine RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
450
400
350
300
250
200
150
100
50
0
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling


Graph Showing SO2 of Bhubaneswari OCP
B.C.M.L. Workshop SO2
S-E of Mine SO2
Raghunathpur Village SO2
N-E of Mine SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling


Graph Showing NOX of Bhubaneswari OCP
B.C.M.L. Workshop NOx
S-E of Mine NOx
Raghunathpur Village NOx
N-E of Mine NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling

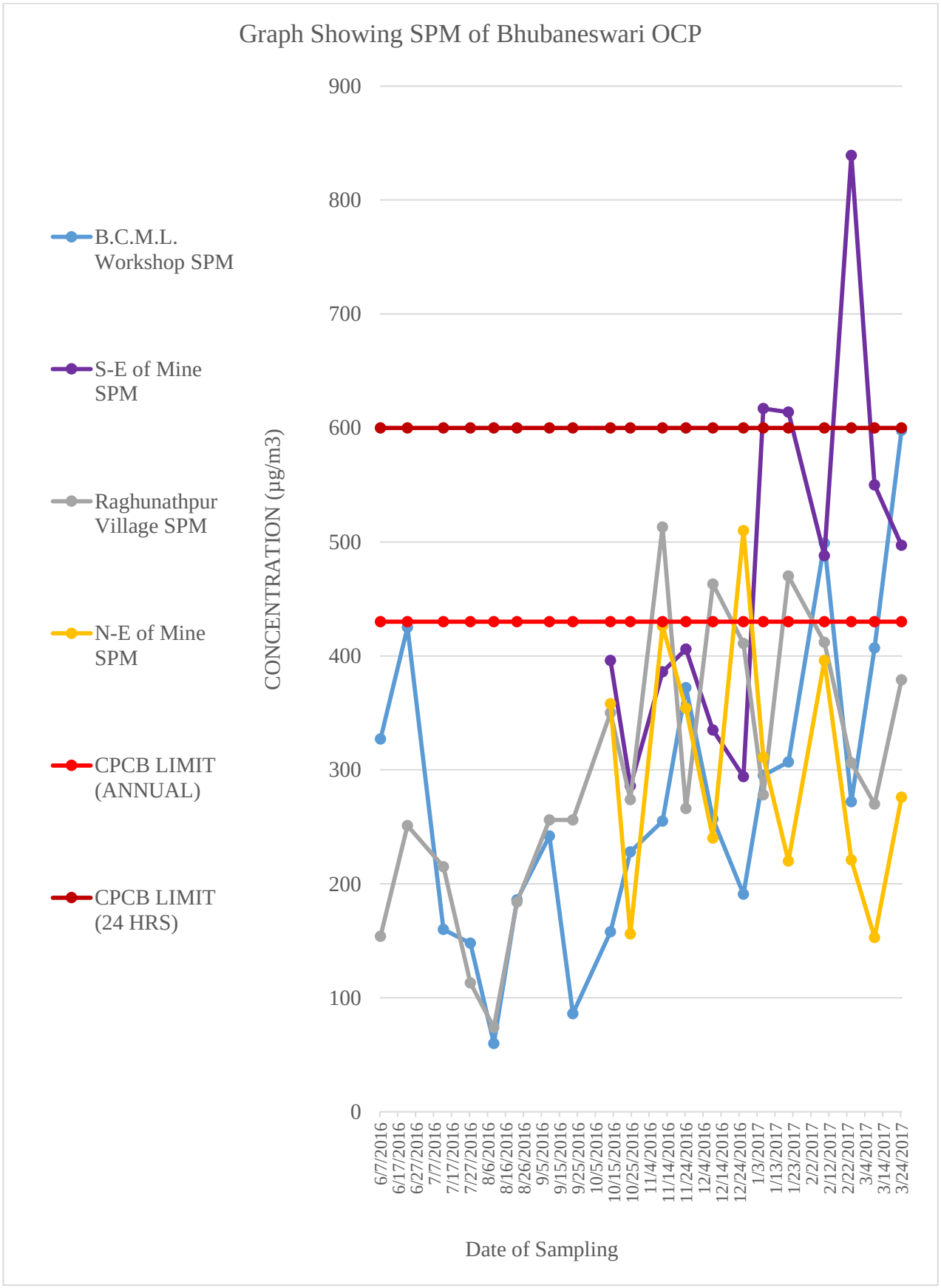

Graph Showing SPM of Bhubaneswari OCP
B.C.M.L. Workshop SPM
S-E of Mine SPM
Raghunathpur Village SPM
N-E of Mine SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
900
800
700
600
500
400
300
200
100
0
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling

Table :9
Project: Ananta OCP
Monitoring Station: Ananta Expansion area(A1)

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
08-06-2016	90	297	<25	14	555	South to North Sunny
23-06-2016	51	132	<25	28	219	South to North Sunny, evening & night rainfall
08-07-2016	72	110	10	<6	246	East to west sunny and rainfall
25-07-2016	47	126	14	10	200	East to west cloudy and rainfall
11-08-2016	34	74	8	13	118	East to west rainfall
24-08-2016	55	168	7	10	282	West to east Sunny & Evening Rainfall
13-09-2016	44	194	14	9	322	West to East cloudy
23-09-2016	54	262	5	<6	556	East to west cloudy
12-10-2016	76	276	11	7	512	East to west Sunny
25-10-2016	32	188	15	18	466	East to west Sunny
10-11-2016	68	364	24	31	725	North East to South West, Sunny
25-11-2016	66	296	18	14	579	West to East, Sunny
12-12-2016	110	329	14	29	536	East to West, Sunny
28-12-2016	88	229	13	18	369	South to West, Sunny
11-01-2017	210	430	11	20	562	East to West, Sunny
25-01-2017	64	539	25	14	698	North to South, Sunny
10-02-2017	139	549	17	12	1158	West to East Sunny
25-02-2017	144	454	3	26	1005	East to West, Sunny
11-03-2017	79	278	4.54	<6	616	East to West, Sunny
28-03-2017	43	532	7.5	8	1079	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	210	549	25	31	1158	
Minimum	32.00	74.00	3.00	7.00	118.00	
Average	78.30	291.35	12.28	16.53	540.15	
95 Percentile	147.30	539.50	24.15	29.40	1082.95	
98 Percentile	184.92	545.20	24.66	30.36	1127.98	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :10
Project: Ananta OCP
Monitoring Station: Ananta Vihar Colony

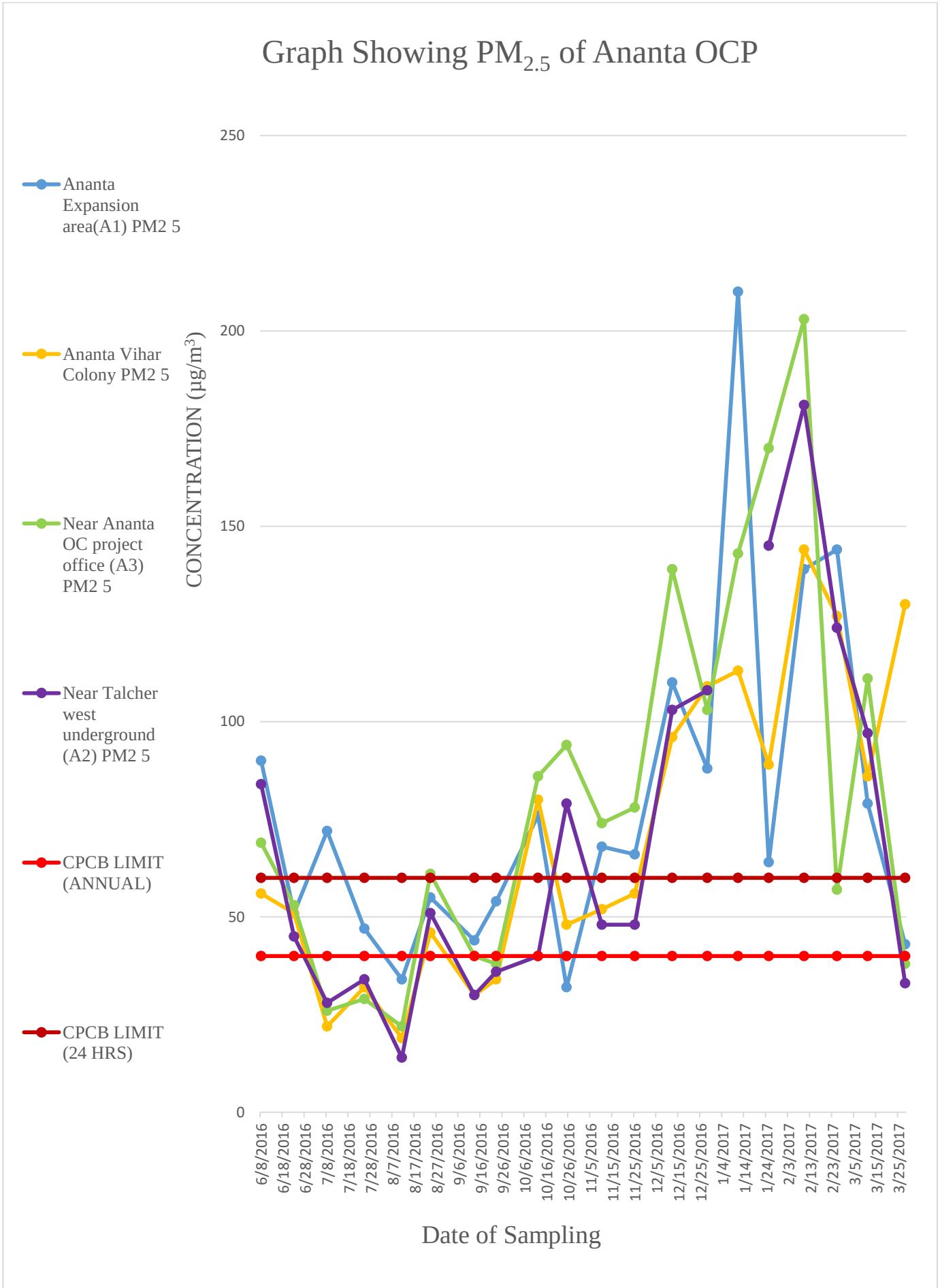
Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
08-06-2016	56	149	<25	13	274	South to North Sunny
23-06-2016	51	108	<25	17	197	South to North Sunny, evening & night rainfall
08-07-2016	22	66	12	20	106	East to west sunny and rainfal
25-07-2016	32	86	10	14	128	East to west cloudy and rainfall
11-08-2016	19	26	3	<6	53	East to west rainfall
24-08-2016	46	114	3	6	167	West to east Sunny & Evening Rainfall
13-09-2016	30	92	6	<6	134	West to East cloudy
23-09-2016	34	106	6	10	180	East to west cloudy
12-10-2016	80	252	14	<6	416	East to west Sunny
25-10-2016	48	228	16	21	355	East to west Sunny
10-11-2016	52	268	14	17	386	North East to South West, Sunny
25-11-2016	56	242	29	35	388	West to East, Sunny
12-12-2016	96	224	19	22	335	East to West, Sunny
28-12-2016	109	314	18	23	440	South to West, Sunny
11-01-2017	113	266	25	27	409	East to West, Sunny
25-01-2017	89	293	36	27	692	North to South, Sunny
10-02-2017	144	161	8	12	247	West to East Sunny
25-02-2017	127	209	63	10	522	East to West, Sunny
11-03-2017	86	98	4.86	15	220	East to West, Sunny
28-03-2017	130	216	7.17	7	352	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	144	314	63	35	692	
Minimum	19.00	26.00	3.00	6.00	53.00	
Average	71.00	175.90	16.34	17.41	300.05	
95 Percentile	130.70	294.05	40.05	28.60	530.50	
98 Percentile	138.68	306.02	53.82	32.44	627.40	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

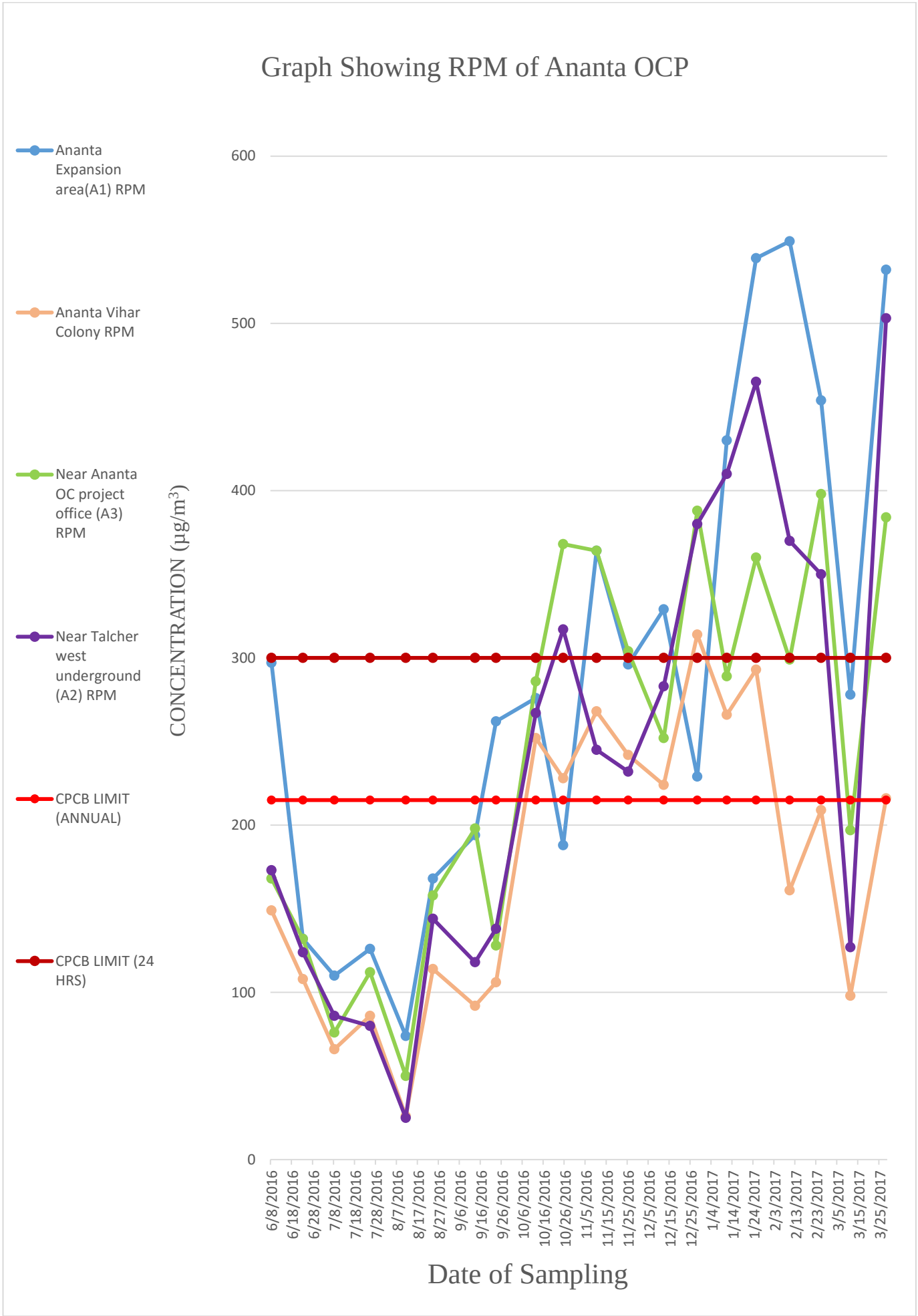
Table :11
Project: Ananta OCP
Monitoring Station: Near Ananta OC project office (A3)

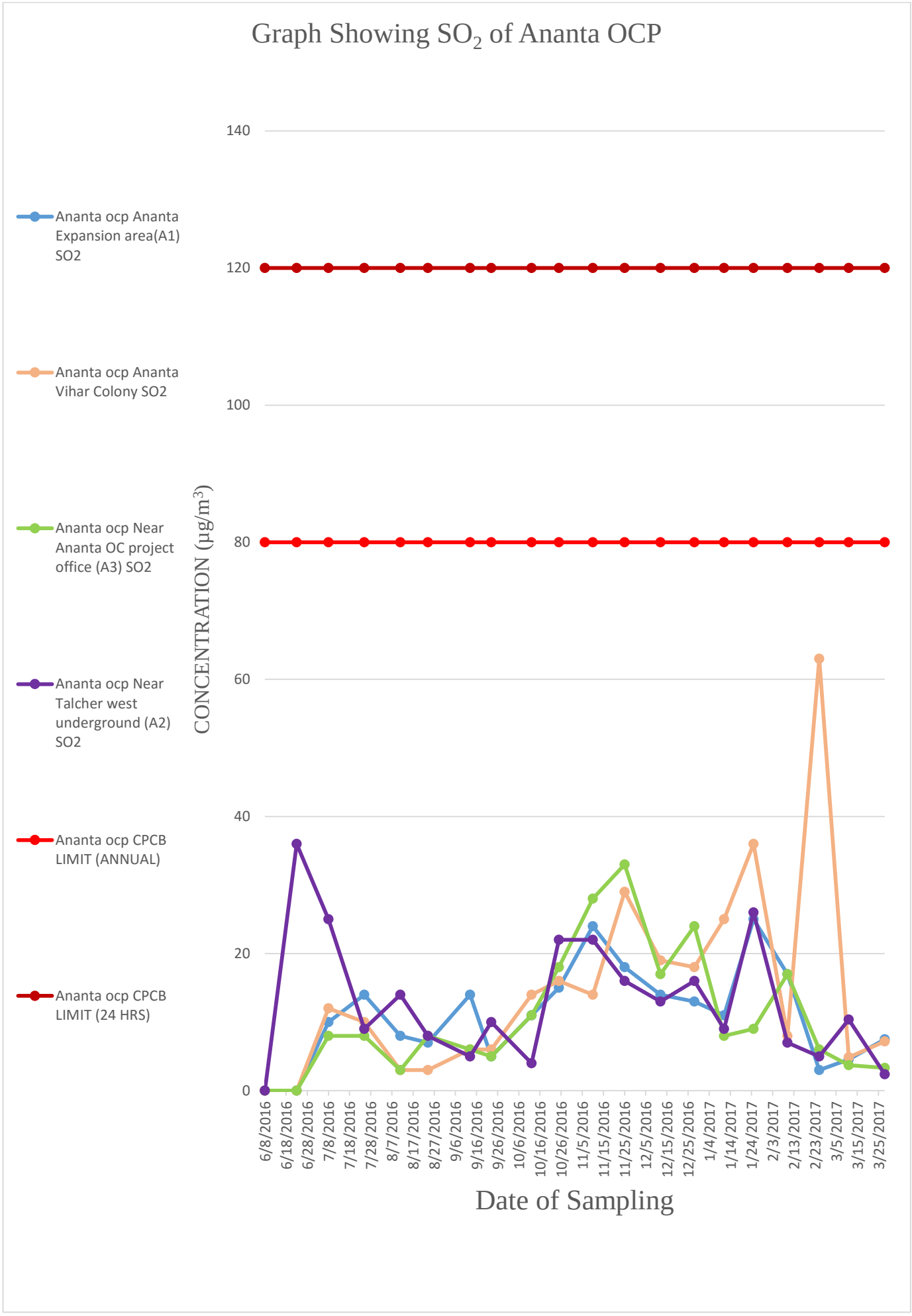
Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
08-06-2016	69	168	<25	11	263	South to North Sunny
23-06-2016	53	132	<25	8	219	South to North Sunny, evening & night rainfall
08-07-2016	26	76	8	14	124	East to west sunny and rainfal
25-07-2016	29	112	8	12	194	East to west cloudy and rainfall
11-08-2016	22	50	3	<6	72	East to west rainfall
24-08-2016	61	158	8	7	230	West to east Sunny & Evening Rainfall
13-09-2016	40	198	6	<6	301	West to East cloudy
23-09-2016	38	128	5	9	194	East to west cloudy
12-10-2016	86	286	11	<6	504	East to west Sunny
25-10-2016	94	368	18	22	596	East to west Sunny
10-11-2016	74	364	28	35	737	North East to South West, Sunny
25-11-2016	78	304	33	29	326	West to East, Sunny
12-12-2016	139	252	17	20	529	East to West, Sunny
28-12-2016	103	388	24	19	531	South to West, Sunny
11-01-2017	143	289	8	22	461	East to West, Sunny
25-01-2017	170	360	9	9	607	North to South, Sunny
10-02-2017	203	299	17	15	481	West to East Sunny
25-02-2017	57	398	6	28	679	East to West, Sunny
11-03-2017	111	197	3.71	22	347	East to West, Sunny
28-03-2017	38	384	3.31	5	814	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	203	398	33	35	814	
Minimum	22.00	50.00	3.00	5.00	72.00	
Average	81.70	245.55	12.00	16.88	410.45	
95 Percentile	171.65	388.50	28.75	30.20	740.85	
98 Percentile	190.46	394.20	31.30	33.08	784.74	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :12
Project: Ananta OCP
Monitoring Station: Near Talcher west underground (A2)

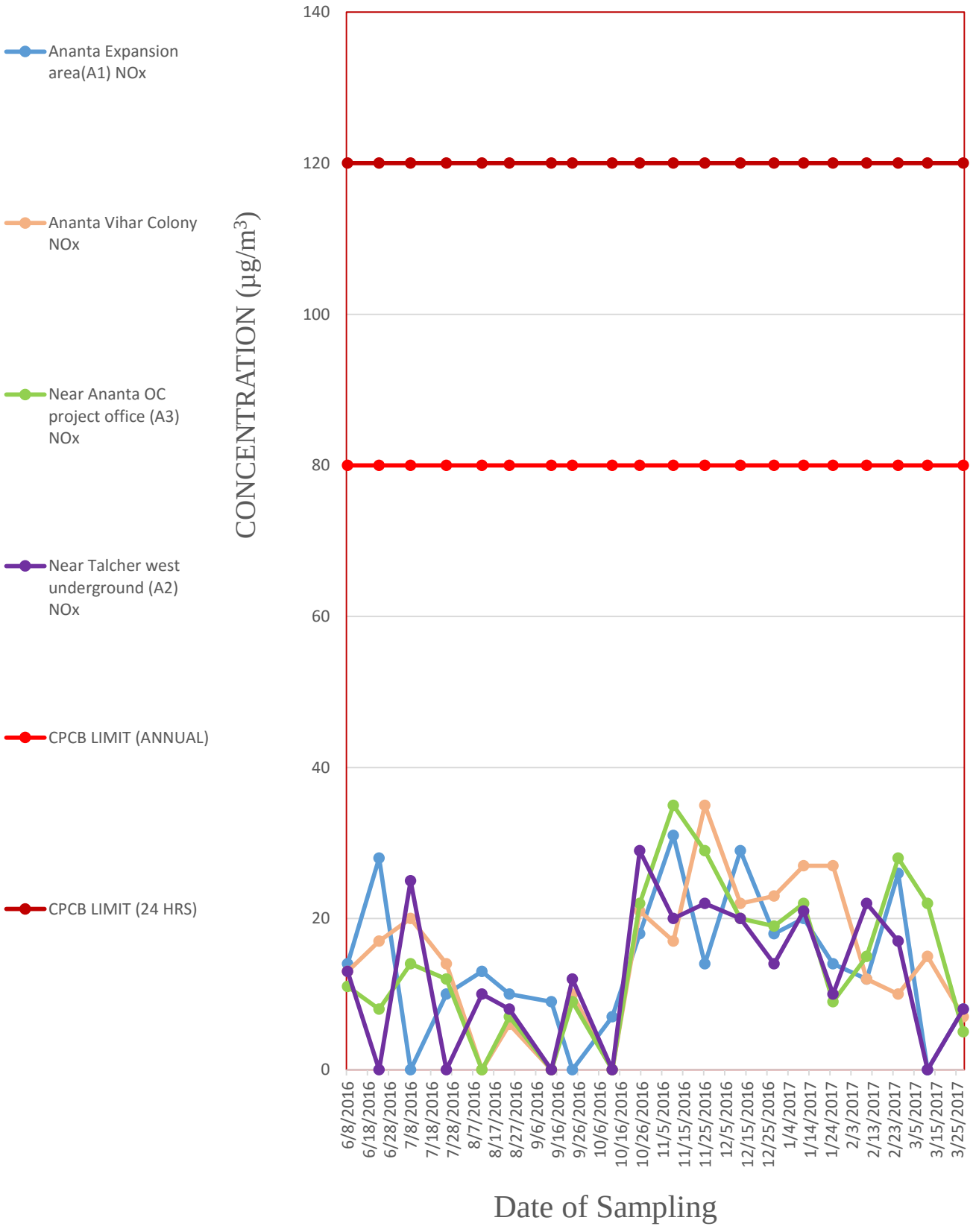
Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
08-06-2016	84	173	<25	13	381	South to North Sunny
23-06-2016	45	124	36	<6	274	South to North Sunny, evening & night rainfall
08-07-2016	28	86	25	25	148	East to west sunny and rainfal
25-07-2016	34	80	9	<6	128	East to west cloudy and rainfall
11-08-2016	14	25	14	10	40	East to west rainfall
24-08-2016	51	144	8	8	237	West to east Sunny & Evening Rainfall
13-09-2016	30	118	5	<6	204	West to East cloudy
23-09-2016	36	138	10	12	196	East to west cloudy
12-10-2016	40	267	4	<6	435	East to west Sunny
25-10-2016	79	317	22	29	605	East to west Sunny
10-11-2016	48	245	22	20	383	North East to South West, Sunny
25-11-2016	48	232	16	22	506	West to East, Sunny
12-12-2016	103	283	13	20	579	East to West, Sunny
28-12-2016	108	380	16	14	501	South to West, Sunny
11-01-2017		410	9	21	546	East to West, Sunny & PM2.5 Sampler Break Down
25-01-2017	145	465	26	10	617	North to South, Sunny
10-02-2017	181	370	7	22	657	West to East Sunny
25-02-2017	124	350	5	17	872	East to West, Sunny
11-03-2017	97	127	10.37	<6	296	East to West, Sunny
28-03-2017	33	503	2.4	8	540	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**181**	**503**	**36**	**29**	**872**	
Minimum	**14**	**25**	**2.40**	**8**	**40**	
Average	**69.89**	**241.85**	**13.67**	**16.73**	**407.25**	
95 Percentile	**148.60**	**466.90**	**27.00**	**26.20**	**667.75**	
98 Percentile	**168.04**	**488.56**	**32.40**	**27.88**	**790.30**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing $PM_{2.5}$ of Ananta OCP
Ananta Expansion area(A1) PM2 5
Ananta Vihar Colony PM2 5
Near Ananta OC project office (A3) PM2 5
Near Talcher west underground (A2) PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m³)
250
200
150
100
50
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling


Graph Showing RPM of Ananta OCP
Ananta Expansion area(A1) RPM
Ananta Vihar Colony RPM
Near Ananta OC project office (A3) RPM
Near Talcher west underground (A2) RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
600
500
400
300
200
100
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling


Graph Showing SO_2 of Ananta OCP
Ananta ocp Ananta Expansion area(A1) SO2
Ananta ocp Ananta Vihar Colony SO2
Ananta ocp Near Ananta OC project office (A3) SO2
Ananta ocp Near Talcher west underground (A2) SO2
Ananta ocp CPCB LIMIT (ANNUAL)
Ananta ocp CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m³)
140
120
100
80
60
40
20
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

Graph Showing NO_x of Ananta OCP



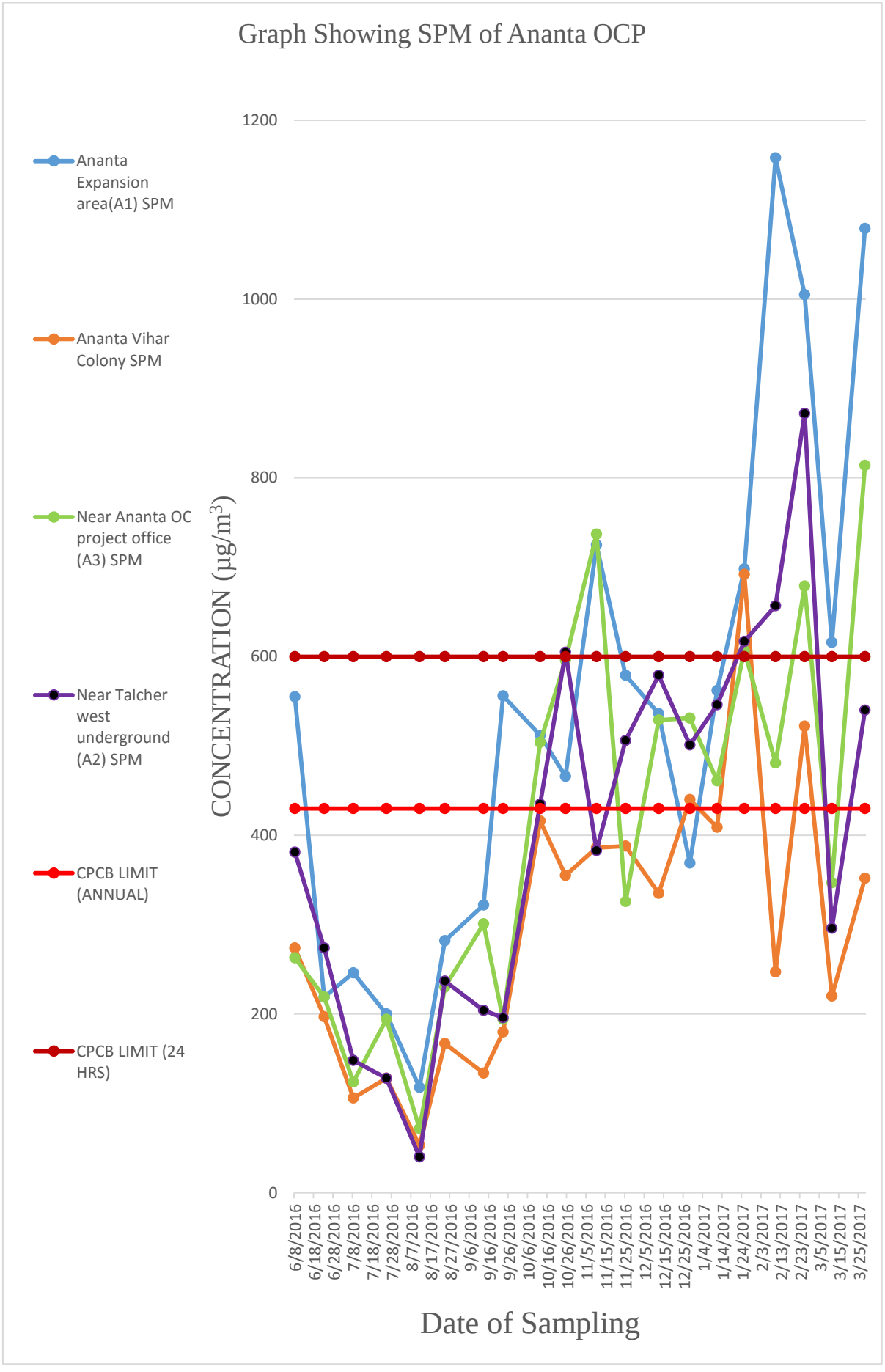

Graph Showing SPM of Ananta OCP
Ananta Expansion area(A1) SPM
Ananta Vihar Colony SPM
Near Ananta OC project office (A3) SPM
Near Talcher west underground (A2) SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
1200
1000
800
600
400
200
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

Table :13
Project: Bharatpur OCP
Monitoring Station: Nakeipasi Village

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
10-06-2016	89	259	<25	<6	379	East to West Suuny
27-06-2016	68	134	<25	<6	275	East to West Sunny, evening rainfall
06-07-2016	54	110	8	13	196	North to south sunny and rainfall
21-07-2016	62	107	11	7	174	North to south cloudy and rainfall
09-08-2016	22	46	8	8	86	East to west rainfall
22-08-2016	46	175	3	9	243	East to west Sunny & Evening Rainfall
09-09-2016	40	164	6	7	239	East to west cloudy
22-09-2016	30	214	5	10	322	East to west cloudy
06-10-2016	28	70	7	8	125	West to East cloudy & rainfall
20-10-2016	52	188	12	17	306	West to East Sunny
01-11-2016	34	161	12	9	235	North East to South West, Sunny
02-11-2016	33	145	12	8	211	North East to South West, Sunny
08-11-2016	42	163	13	10	314	North East to South West, Sunny
09-11-2016	38	161	10	<6	236	North East to South West, Sunny
16-11-2016	48	228	15	19	386	West to East, Sunny & Cloudy
17-11-2016	42	168	14	17	300	West to East, Sunny & Cloudy
23-11-2016	56	238	18	13	423	East to West, Sunny & Cloudy
24-11-2016	46	190	17	11	324	East to West, Cloudy
01-12-2016	112	169	24	18	214	East to West, Sunny
02-12-2016	117	158	20	25	276	East to West, Sunny
05-12-2016	94	160	18	26	305	West to East, Coudy
06-12-2016	92	173	19	24	310	East to West, Sunny
16-12-2016	119	176	11	16	298	South to West, Sunny
19-12-2016	75	88	8	11	141	South to West, Sunny
20-12-2016	90	279	18	21	513	South to West, Sunny
21-12-2016	106	126	10	16	190	South to West, Sunny
03-01-2017	67	242	8	8	284	South to North Sunny
04-01-2017	52	230	10	10	271	West to East Sunny
09-01-2017	53	334	9	15	573	West to East, Cloudy
10-01-2017	71	231	11	18	389	South to North Cloudy
17-01-2017	43	226	7	12	412	East to West, Sunny
18-01-2017	61	332	9	16	475	East to West, Sunny
23-01-2017	14	173	8	8	437	South to West, Sunny
24-01-2017	123	237	6	12	540	East to South, Sunny
01-02-2017	173	290	7	12	435	East to West, Sunny
02-02-2017	136	269	7	8	400	North to South, Sunny
08-02-2017	168	450	6	23	617	North to South, Sunny
09-02-2017	109	293	5	<6	535	South to West Sunny
16-02-2017	92	256	2	14	356	West to East Sunny
17-02-2017	68	254	4	18	384	North to South, Sunny
23-02-2017	104	367	6	13	405	West to East Sunny
24-02-2017	149	414	8	9	641	North to South, Sunny
01-03-2017	105	282	10.11	<6	412	East to West, Sunny
02-03-2017	84	256	3.43	6	408	North to South, Sunny
08-03-2017	30	33	3.07	15	79	South to North, Rainfall
09-03-2017	151	268	6.05	30	368	East to West, Rainfalll
16-03-2017	108	288	2.97	8	425	West to East, Sunny
17-03-2017	146	177	10.85	9	263	North to South, Sunny
23-03-2017	131	321	3.4	6	434	South to North, Sunny
24-03-2017	151	444	1.83	<6	561	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**173**	**450**	**24**	**30**	**641**	
Minimum	**14.00**	**33.00**	**1.83**	**6.00**	**79.00**	
95 Percentile	**150.50**	**358.75**	**18.85**	**25.00**	**564.75**	
98 Percentile	**168.50**	**417.60**	**20.56**	**26.80**	**619.40**	
Average	**79.04**	**213.73**	**9.61**	**13.48**	**338.04**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :14
Project: Bharatpur OCP
Monitoring Station: Near civil maintenance office of Hingula Area

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
10-06-2016	61	89	<25	8	174	East to West Suuny
27-06-2016	58	159	<25	16	295	East to West Sunny, evening rainfall
06-07-2016	32	93	2	12	156	North to south sunny and rainfall
21-07-2016	63	114	7	9	216	North to south cloudy and rainfall
09-08-2016	20	51	6	11	66	East to west rainfall
22-08-2016	33	88	5	6	136	East to west Sunny & Evening Rainfall
09-09-2016	37	154	9	<6	246	East to west cloudy
22-09-2016	14	58	7	8	86	East to west cloudy
06-10-2016	46	208	7	6	312	West to East cloudy & rainfall
20-10-2016	56	208	19	20	318	West to East Sunny
03-11-2016	34	178	14	8	288	North East to South West, Sunny
23-11-2016		178	10	9	267	East to West, Sunny & Cloudy
06-12-2016	68	70	24	29	244	East to West, Sunny
21-12-2016	25	87	13	18	208	South to West, Sunny
09-01-2017	22	222	14	21	340	West to East, Cloudy
23-01-2017	48	140	6	10	232	South to West, Sunny
08-02-2017	122	172	12	6	296	North to South, Sunny
23-02-2017	139	202	5	13	305	West to East Sunny
08-03-2017	68	81	6.65	16	138	South to North, Rainfall
23-03-2017	75	230	4.69	13	349	South to North, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**139**	**230**	**24**	**29**	**349**	
Minimum	**14.00**	**51.00**	**2.00**	**6.00**	**66.00**	
Average	**53.74**	**139.10**	**9.52**	**12.58**	**233.60**	
95 Percentile	**123.70**	**222.40**	**19.75**	**21.80**	**340.45**	
98 Percentile	**132.88**	**226.96**	**22.30**	**26.12**	**345.58**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :15
Project: Bharatpur OCP
Monitoring Station: Near ETP

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
10-06-2016	70	221	<25	28	439	East to West Suuny
27-06-2016	47	172	<25	7	260	East to West Suuny, evening rainfall
06-07-2016	78	122	12	13	345	North to south sunny and rainfall
21-07-2016	74	184	11	<6	340	North to south cloudy and rainfall
09-08-2016	15	41	5	10	57	East to west rainfall
22-08-2016	54	118	7	11	162	East to west Sunny & Evening Rainfall
09-09-2016	51	188	8	6	362	East to west cloudy
22-09-2016	38	134	7	11	221	East to west cloudy
06-10-2016	38	218	4	7	342	West to East cloudy & rainfall
20-10-2016	54	226	15	18	344	West to East Sunny
03-11-2016	56	338	18	25	584	North East to South West, Sunny
23-11-2016	62	294	23	27	556	East to West, Sunny & Cloudy
06-12-2016	25	201	17	20	379	East to West, Sunny
21-12-2016	41	233	12	15	382	South to West, Sunny
09-01-2017	109	325	7	12	585	West to East, Cloudy
23-01-2017	90	351	8	15	556	South to West, Sunny
08-02-2017	190	438	9	15	939	North to South, Sunny
23-02-2017	100	353	28	18	909	West to East Sunny
08-03-2017	102	155	3.01	15	287	South to North, Rainfall
23-03-2017	80	451	2.8	<6	937	South to North, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**190**	**451**	**28**	**28**	**939**	
Minimum	**15.00**	**41.00**	**2.80**	**6.00**	**57.00**	
Average	**68.70**	**238.15**	**10.93**	**15.17**	**449.30**	
95 Percentile	**113.05**	**438.65**	**23.75**	**27.15**	**937.10**	
98 Percentile	**159.22**	**446.06**	**26.30**	**27.66**	**938.24**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :16
Project: Bharatpur OCP
Monitoring Station: Near View point (A4)

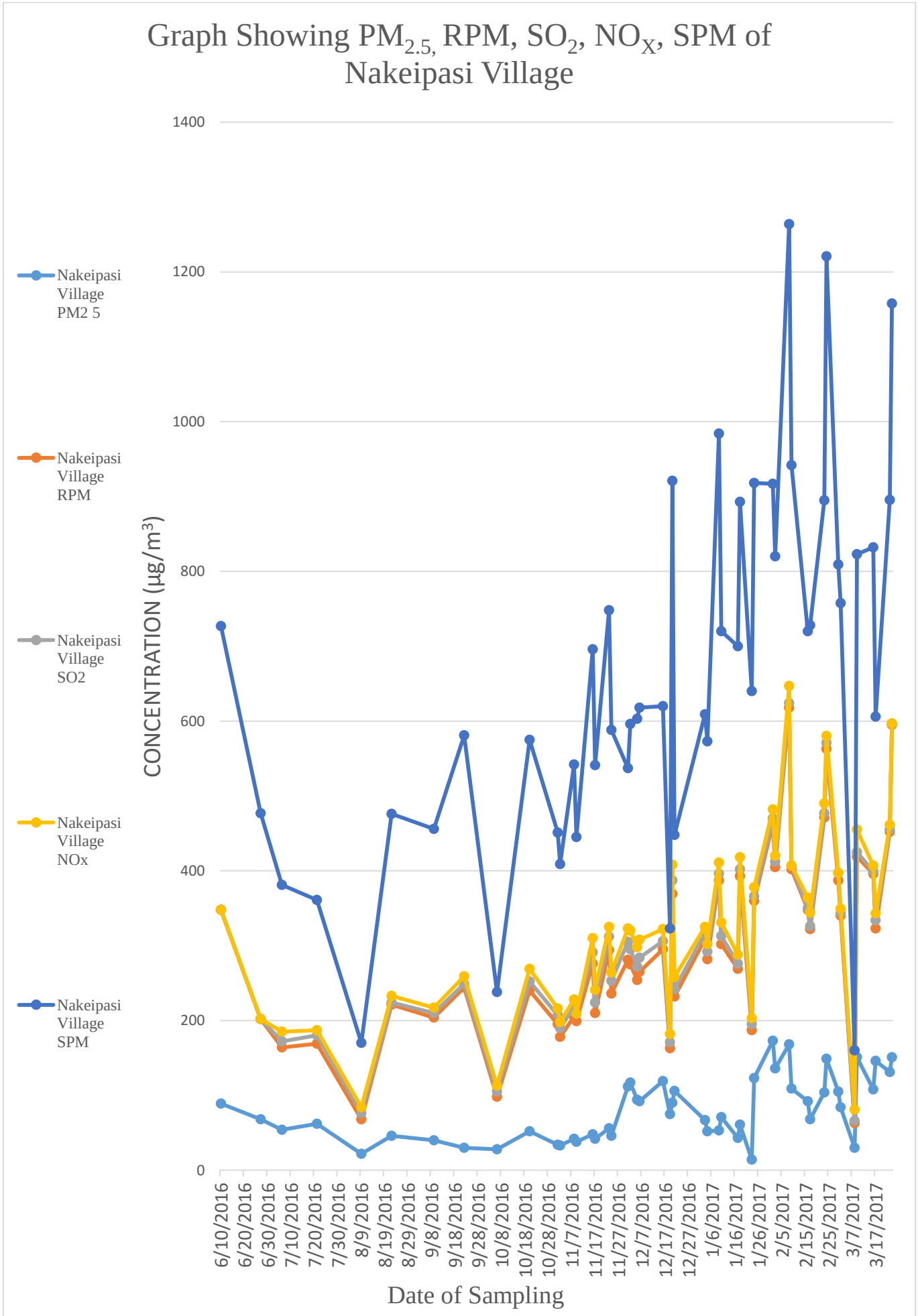
Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
09-06-2016	62	70	<25	6	144	West to East Sunny
24-06-2016	57	246	<25	<6	450	West to East Sunny
07-07-2016	45	142	7	13	280	West to east sunny and rainfall
22-07-2016	28	79	10	6	138	East to west cloudy and rainfall
12-08-2016	33	98	14	10	144	North to South Rainfall
25-08-2016	78	244	8	6	366	South to north Sunny & Evening Rainfall
14-09-2016	44	244	11	<6	362	East to west cloudy & evening rainfall
27-09-2016	46	168	12	8	234	West to East cloudy & evening rainfall
14-10-2016	84	296	12	6	534	East to west Sunny
26-10-2016	86	308	16	24	576	East to west Sunny
09-11-2016	78	348	20	17	564	North East to South West, Sunny
28-11-2016	76	288	28	36	586	West to East, Sunny & Cloudy
13-12-2016	162	269	10	<6	573	East to West, Sunny
27-12-2016	95	149	7	10	230	South to West, Sunny
10-01-2017	240	346	11	14	489	South to North Cloudy
24-01-2017	111	325	34	19	658	East to South, Sunny
14-02-2017	169	370	66	9	649	South to North Sunny
27-02-2017	147	445	9	17	964	East to West, Sunny
10-03-2017	70	152	3.31	6	195	East to West, Rainfall
27-03-2017	59	316	2.06	9	556	North to South, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**240**	**445**	**66**	**36**	**964**	
Minimum	**28.00**	**70.00**	**2.06**	**6.00**	**138.00**	
Average	**88.50**	**245.15**	**15.58**	**12.71**	**434.60**	
95 Percentile	**172.55**	**373.75**	**38.80**	**26.40**	**673.30**	
98 Percentile	**213.02**	**416.50**	**55.12**	**32.16**	**847.72**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

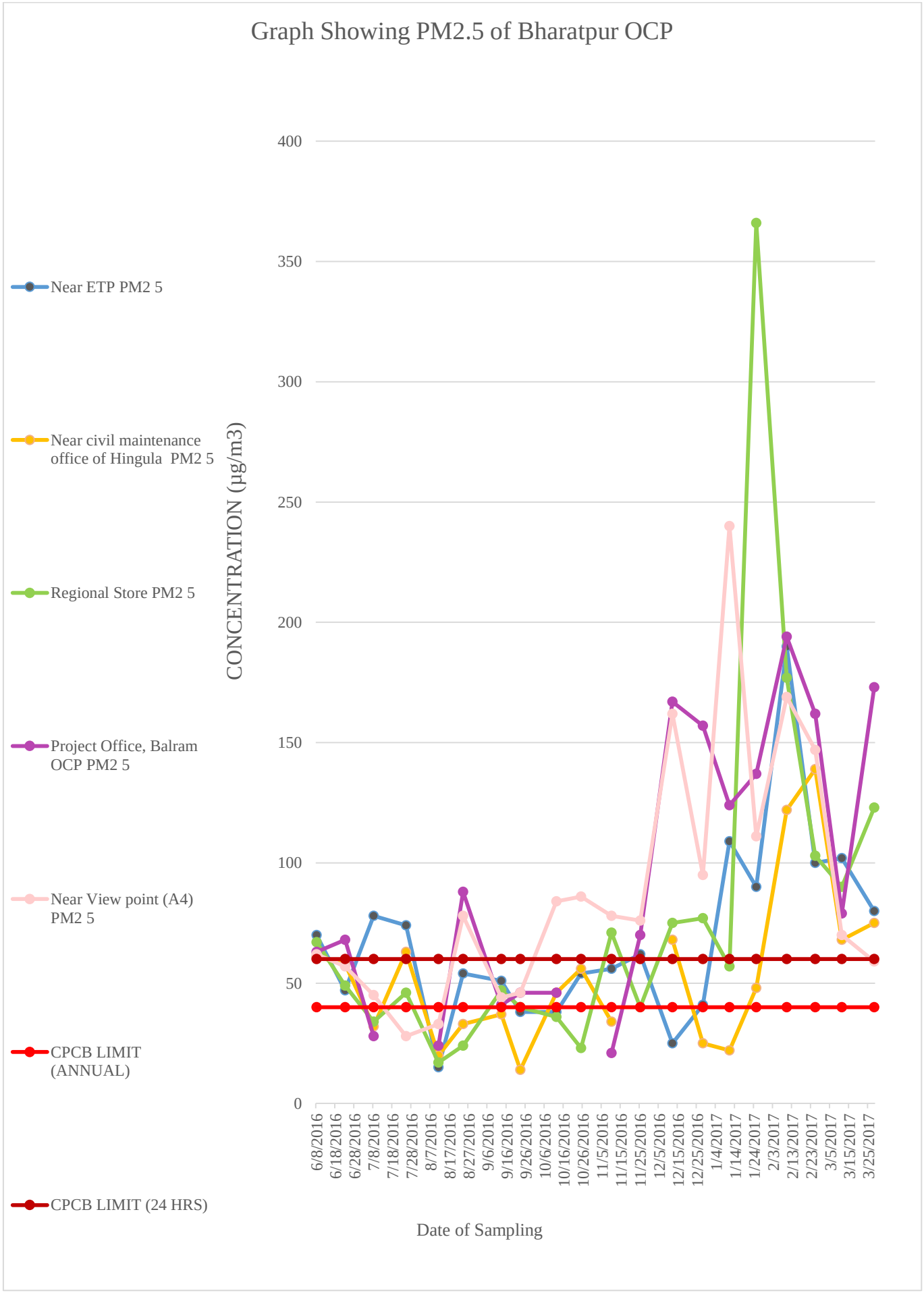
Table :17
Project: Bharatpur OCP
Monitoring Station: Project Office, Balram OCP

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
03-06-2016	63	213	<25	27	475	East to West Sunny
20-06-2016	68	353	<25	57	537	West to East Sunny
05-07-2016	28	83	3	<6	179	East to west sunny and rainfall
20-07-2016						Mines strike
08-08-2016	24	44	7	17	75	South to north rainfall
19-08-2016	88	348	5	9	724	West to east Sunny
08-09-2016	41	258	16	<6	552	East to west sunny & cloudy
21-09-2016	46	177	7	<6	273	East to west cloudy
05-10-2016	46	208	10	6	314	East to west cloudy
19-10-2016						mine strike
04-11-2016	21	132	10	12	351	North East to South West, Sunny
21-11-2016	70	274	26	24	508	East to West, Sunny & Cloudy
08-12-2016	167	308	12	<6	513	East to West, Sunny
24-12-2016	157	165	9	15	363	South to West, Sunny
05-01-2017	124	324	14	12	443	East to West, Sunny
19-01-2017	137	544	9	7	910	North to South, Sunny
07-02-2017	194	551	6	28	1041	East to West, Sunny
22-02-2017	162	454	3	24	1014	North to South, Sunny
07-03-2017	79	182	1.69	10	424	South to North, Cloudy
22-03-2017	173	529	2.23	10	867	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	194	551	26	57	1041	
Minimum	21.00	44.00	1.69	6.00	75.00	
Average	93.78	285.94	8.81	18.43	531.28	
95 Percentile	176.15	545.05	18.50	38.15	1018.05	
98 Percentile	186.86	548.62	23.00	49.46	1031.82	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

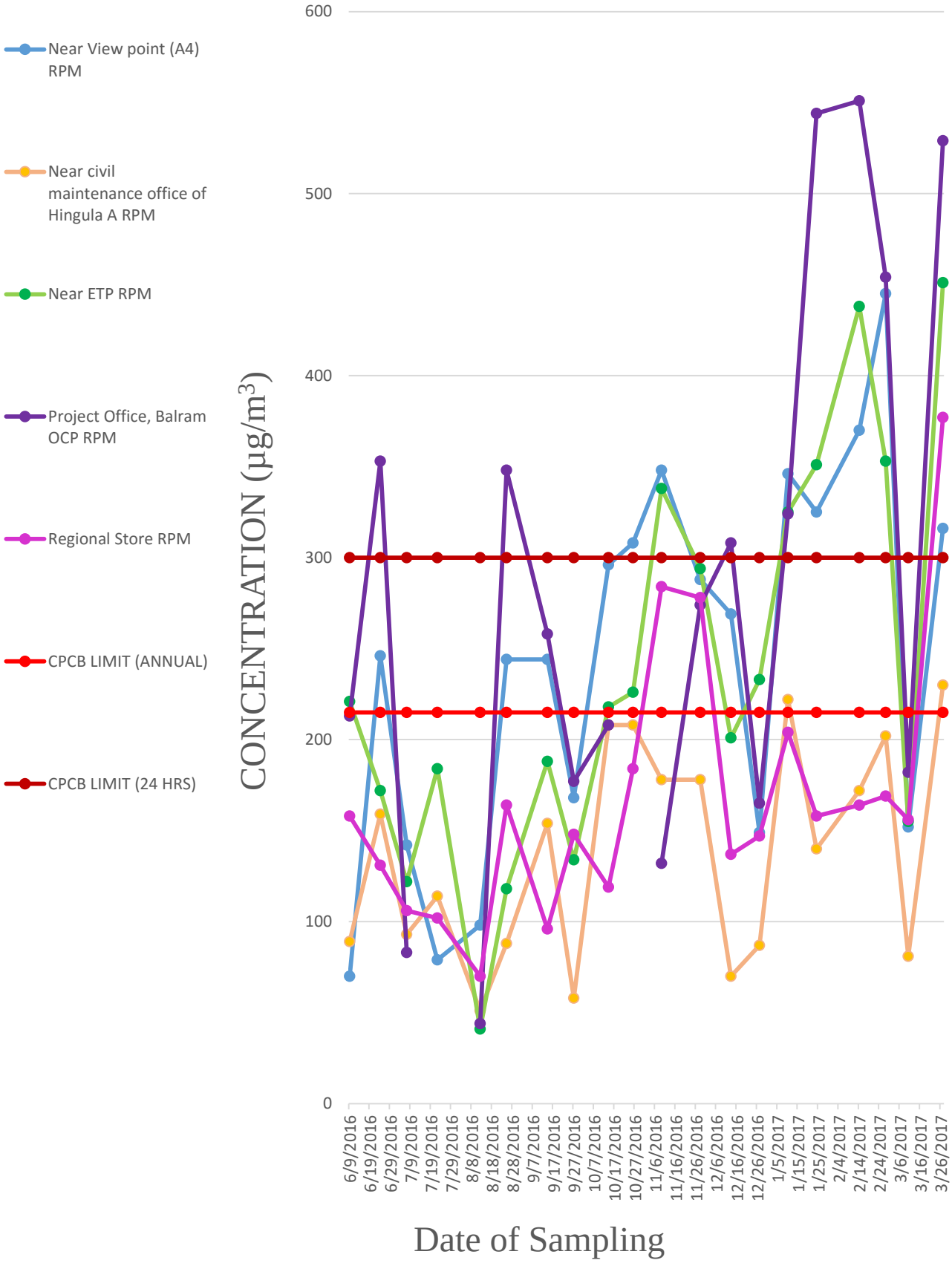
Table :18
Project: Bharatpur OCP
Monitoring Station: Regional Store

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
10-06-2016	67	158	73	17	241	East to West Suuny
27-06-2016	49	131	<25	8	262	East to West Suuny, evening rainfall
06-07-2016	34	106	9	7	239	North to south sunny and rainfall
21-07-2016	46	102	12	8	178	North to south cloudy and rainfall
09-08-2016	17	70	9	8	96	East to west rainfall
22-08-2016	24	164	5	16	266	East to west Sunny & Evening Rainfall
09-09-2016	47	96	12	7	154	East to west cloudy
22-09-2016	40	148	9	14	220	East to west cloudy
06-10-2016	36	119	25	9	189	West to East cloudy & rainfall
20-10-2016	23	184	8	10	292	West to East Sunny
03-11-2016	71	284	29	24	455	North East to South West, Sunny
23-11-2016	40	278	14	18	576	East to West, Sunny & Cloudy
06-12-2016	75	137	15	19	406	East to West, Sunny
21-12-2016	77	147	11	15	405	South to West, Sunny
09-01-2017	57	204	9	13	339	West to East, Cloudy
23-01-2017	366	158	9	9	276	South to West, Sunny
08-02-2017	177	164	11	9	471	North to South, Sunny
23-02-2017	103	169	6	16	347	West to East Sunny
08-03-2017	90	156	15.4	23	290	South to North, Rainfall
22-03-2017	123	377	4.93	9	607	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	366	377	73	24	607	
Minimum	17.00	70.00	4.93	7.00	96.00	
Average	78.10	167.60	15.07	12.95	315.45	
95 Percentile	186.45	288.65	33.40	23.05	577.55	
98 Percentile	294.18	341.66	57.16	23.62	595.22	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

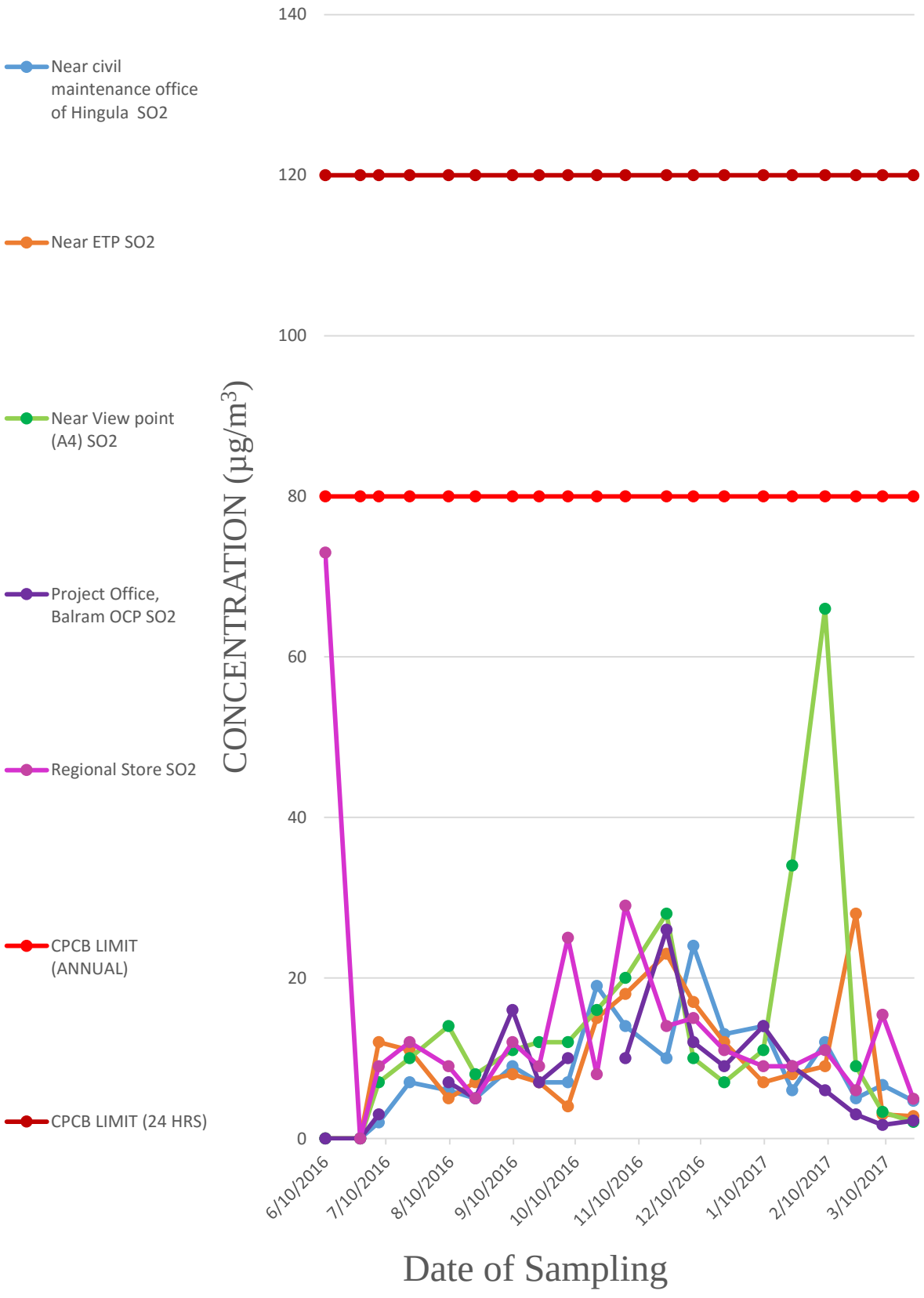

Graph Showing $PM_{2.5,}$ RPM, SO_2, NO_X, SPM of Nakeipasi Village
Nakeipasi Village PM2 5
Nakeipasi Village RPM
Nakeipasi Village SO2
Nakeipasi Village NOx
Nakeipasi Village SPM
CONCENTRATION (µg/m³)
1400
1200
1000
800
600
400
200
0
6/10/2016
6/20/2016
6/30/2016
7/10/2016
7/20/2016
7/30/2016
8/9/2016
8/19/2016
8/29/2016
9/8/2016
9/18/2016
9/28/2016
10/8/2016
10/18/2016
10/28/2016
11/7/2016
11/17/2016
11/27/2016
12/7/2016
12/17/2016
12/27/2016
1/6/2017
1/16/2017
1/26/2017
2/5/2017
2/15/2017
2/25/2017
3/7/2017
3/17/2017
Date of Sampling

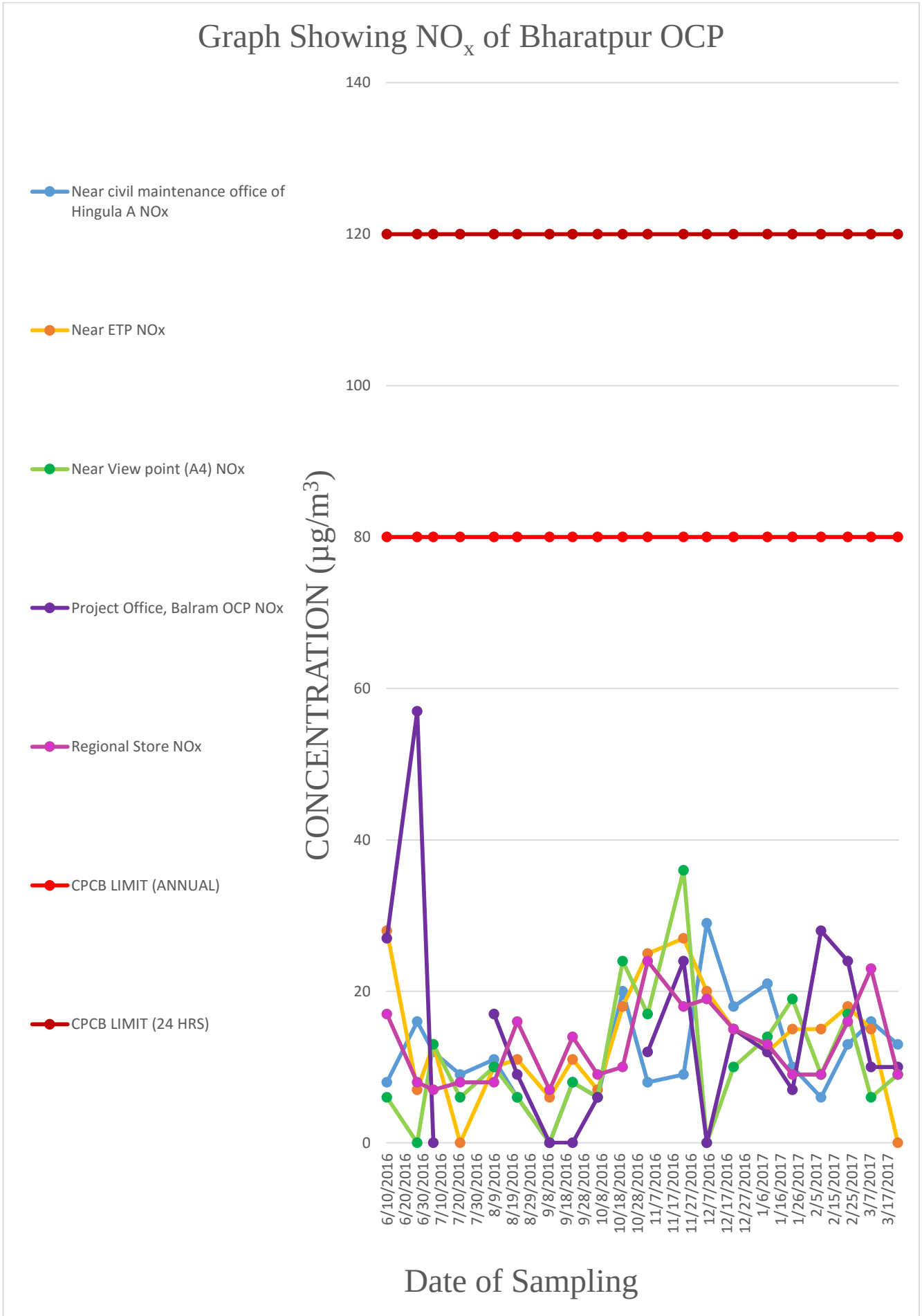

Graph Showing PM2.5 of Bharatpur OCP
CONCENTRATION (µg/m3)
400
350
300
250
200
150
100
50
0
Near ETP PM2 5
Near civil maintenance office of Hingula PM2 5
Regional Store PM2 5
Project Office, Balram OCP PM2 5
Near View point (A4) PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

Graph Showing RPM of Bharatpur OCP



Graph Showing SO_2 of Bharatpur OCP




Graph Showing NO_x of Bharatpur OCP
Near civil maintenance office of Hingula A NOx
Near ETP NOx
Near View point (A4) NOx
Project Office, Balram OCP NOx
Regional Store NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/10/2016
6/20/2016
6/30/2016
7/10/2016
7/20/2016
7/30/2016
8/9/2016
8/19/2016
8/29/2016
9/8/2016
9/18/2016
9/28/2016
10/8/2016
10/18/2016
10/28/2016
11/7/2016
11/17/2016
11/27/2016
12/7/2016
12/17/2016
12/27/2016
1/6/2017
1/16/2017
1/26/2017
2/5/2017
2/15/2017
2/25/2017
3/7/2017
3/17/2017
Date of Sampling

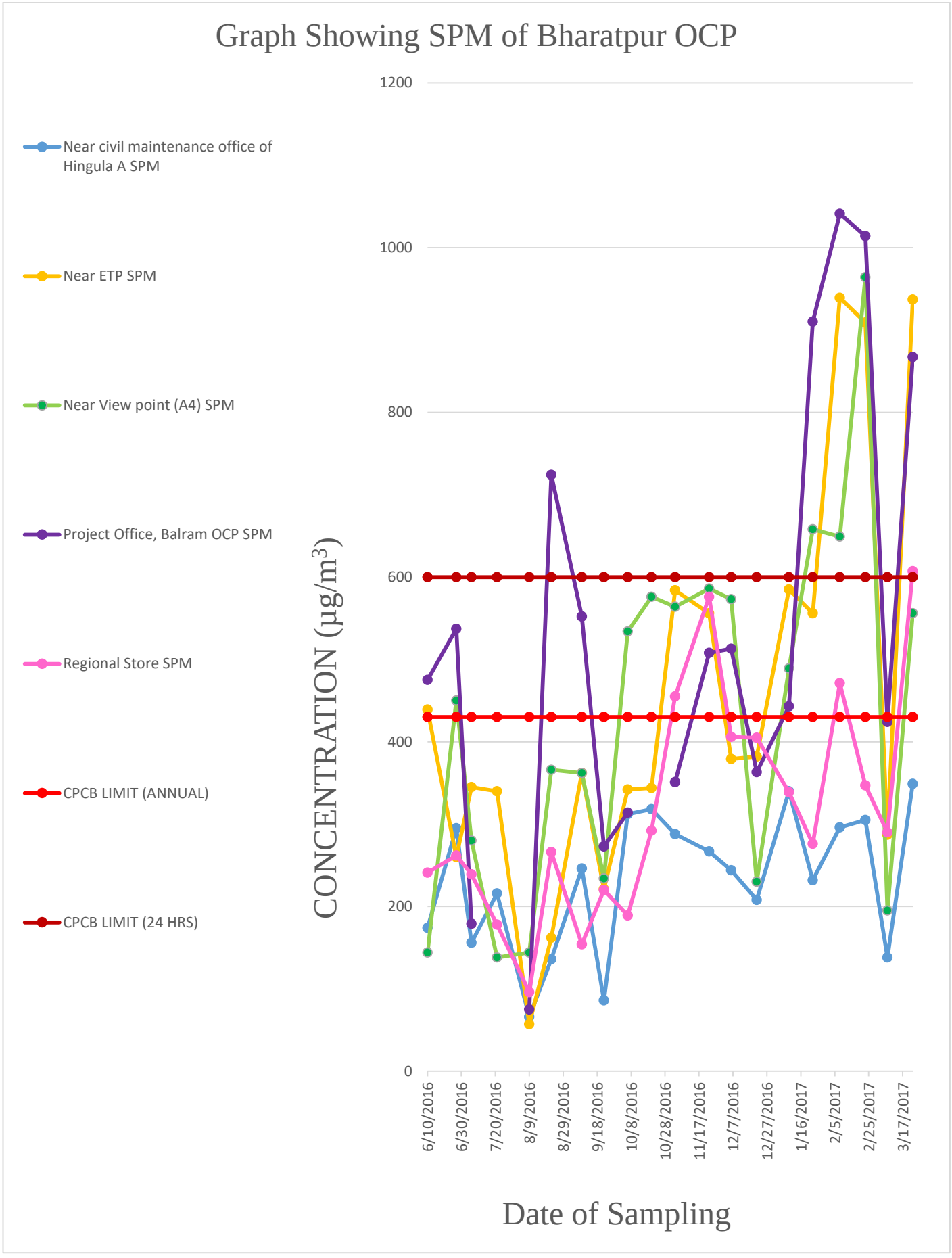

Graph Showing SPM of Bharatpur OCP
Near civil maintenance office of Hingula A SPM
Near ETP SPM
Near View point (A4) SPM
Project Office, Balram OCP SPM
Regional Store SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
1200
1000
800
600
400
200
0
6/10/2016
6/30/2016
7/20/2016
8/9/2016
8/29/2016
9/18/2016
10/8/2016
10/28/2016
11/17/2016
12/7/2016
12/27/2016
1/16/2017
2/5/2017
2/25/2017
3/17/2017
Date of Sampling

Table :19
Project: Chhendipada OCP
Monitoring Station: Dolamandap Chhak

Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
01-06-2016	46	158	<25	14	212	East to West Suuny
16-06-2016	53	87	<25	13	199	South to north sunny
01-07-2016	23	74	3	<6	166	East to west sunny and rainfall
18-07-2016	30	92	3	9	154	West to east cloudy and rainfall
04-08-2016	33	76	7	8	138	West to East rainfall
17-08-2016	19	227	8	<6	295	East to West Sunny
06-09-2016	17	52	16	11	76	East to west cloudy & rainfall
19-09-2016	36	146	7	14	214	East to west cloudy
03-10-2016	22	142	6	<6	221	East to west cloudy
17-10-2016	20	120	10	9	192	East to west Sunny
02-11-2016	14	94	5	<6	146	North East to South West, Sunny
17-11-2016	32	158	13	18	236	West to East, Sunny & Cloudy
02-12-2016	21	118	15	20	238	East to West, Sunny
19-12-2016						Sampler Breakdown
02-01-2017	85	166	11	12	208	East to West, Sunny
16-01-2017	74	271	11	6	326	South to East, Sunny
03-02-2017	103	145	7	7	321	East to West, Sunny
20-02-2017	95	160	2	18	373	North to East, Sunny
03-03-2017	30	31	1.33	<6	84	North to South, Sunny
20-03-2017	76	264	8.29	15	365	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**103**	**271**	**16**	**20**	**373**	
Minimum	**14**	**31**	**1.33**	**6**	**76**	
Average	**43.63**	**135.84**	**7.86**	**12.43**	**219.16**	
95 Percentile	**95.80**	**264.70**	**15.20**	**18.70**	**365.80**	
98 Percentile	**100.12**	**268.48**	**15.68**	**19.48**	**370.12**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 20
Project: Chhendipada OCP
Monitoring Station: Mamuria sahi

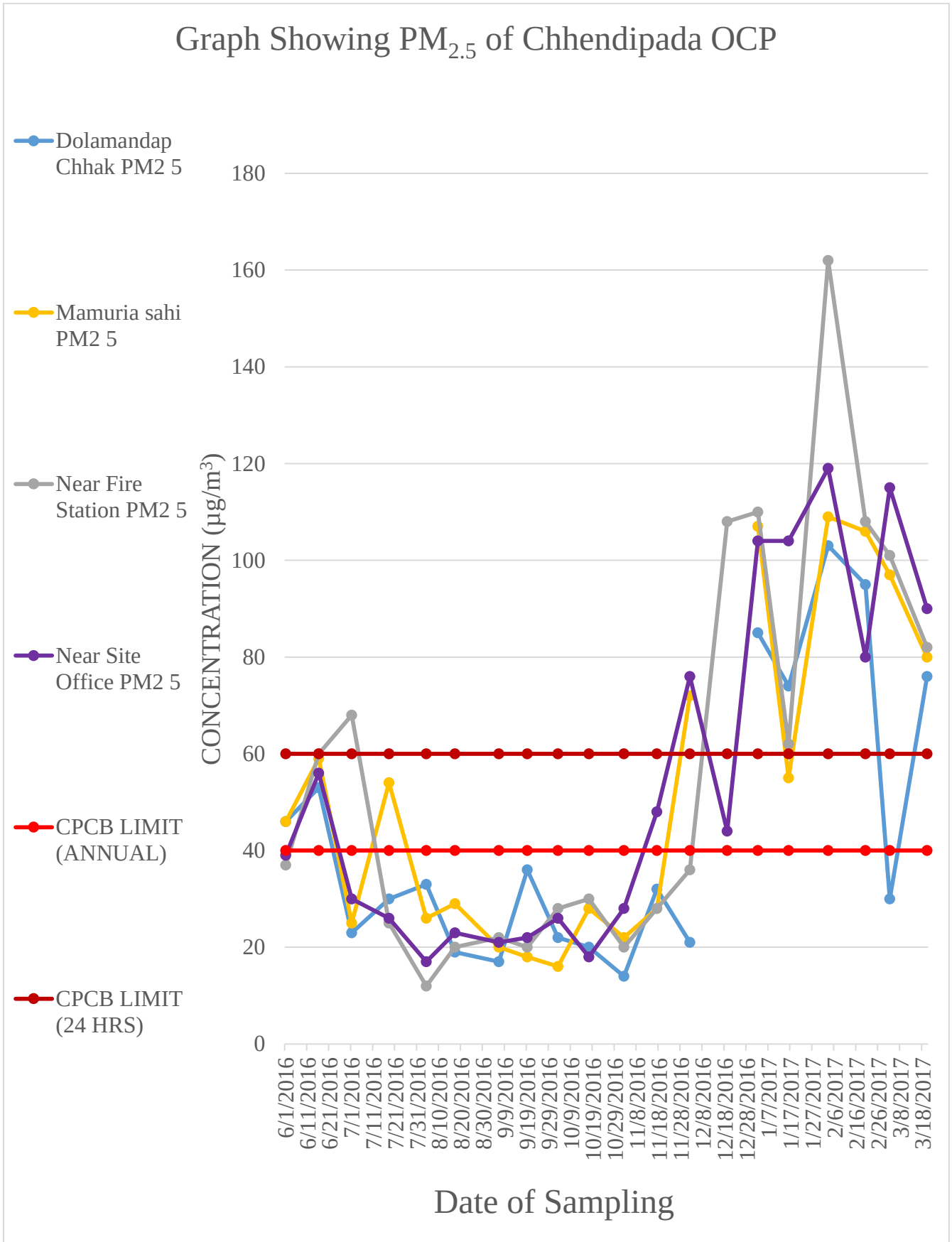
Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
01-06-2016	46	68	<25	18	125	East to West Suuny
16-06-2016	59	184	<25	11	235	South to north sunny
01-07-2016	25	94	17	11	202	East to west sunny and rainfall
18-07-2016	54	134	12	10	222	West to east cloudy and rainfall
04-08-2016	26	89	5	<6	96	West to East rainfall
17-08-2016	29	72	6	7	123	East to West Sunny
06-09-2016	20	55	15	8	94	East to west cloudy & rainfall
19-09-2016	18	84	5	10	138	East to west cloudy
03-10-2016	16	98	9	<6	156	East to west cloudy
17-10-2016	28	148	10	13	232	East to west Sunny
02-11-2016	22	122	15	13	214	North East to South West, Sunny
17-11-2016	28	148	15	20	325	West to East, Sunny & Cloudy
02-12-2016	72	301	9	7	312	East to West, Sunny
19-12-2016						Sampler Breakdown
02-01-2017	107	109	12	13	191	East to West, Sunny
16-01-2017	55	161	7	11	210	South to East, Sunny
03-02-2017	109	142	6	13	270	East to West, Sunny
20-02-2017	106	670	3	11	723	North to East, Sunny
03-03-2017	97	136	2.52	7	238	North to South, Sunny
20-03-2017	80	82	3.32	11	128	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m^3**
Maximum	**109**	**670**	**17**	**20**	**723**	
Minimum	**16**	**55**	**3**	**7**	**94**	
Average	**52.47**	**152.47**	**8.93**	**11.41**	**222.84**	
95 Percentile	**107.20**	**337.90**	**15.40**	**18.40**	**364.80**	
98 Percentile	**108.28**	**537.16**	**16.36**	**19.36**	**579.72**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

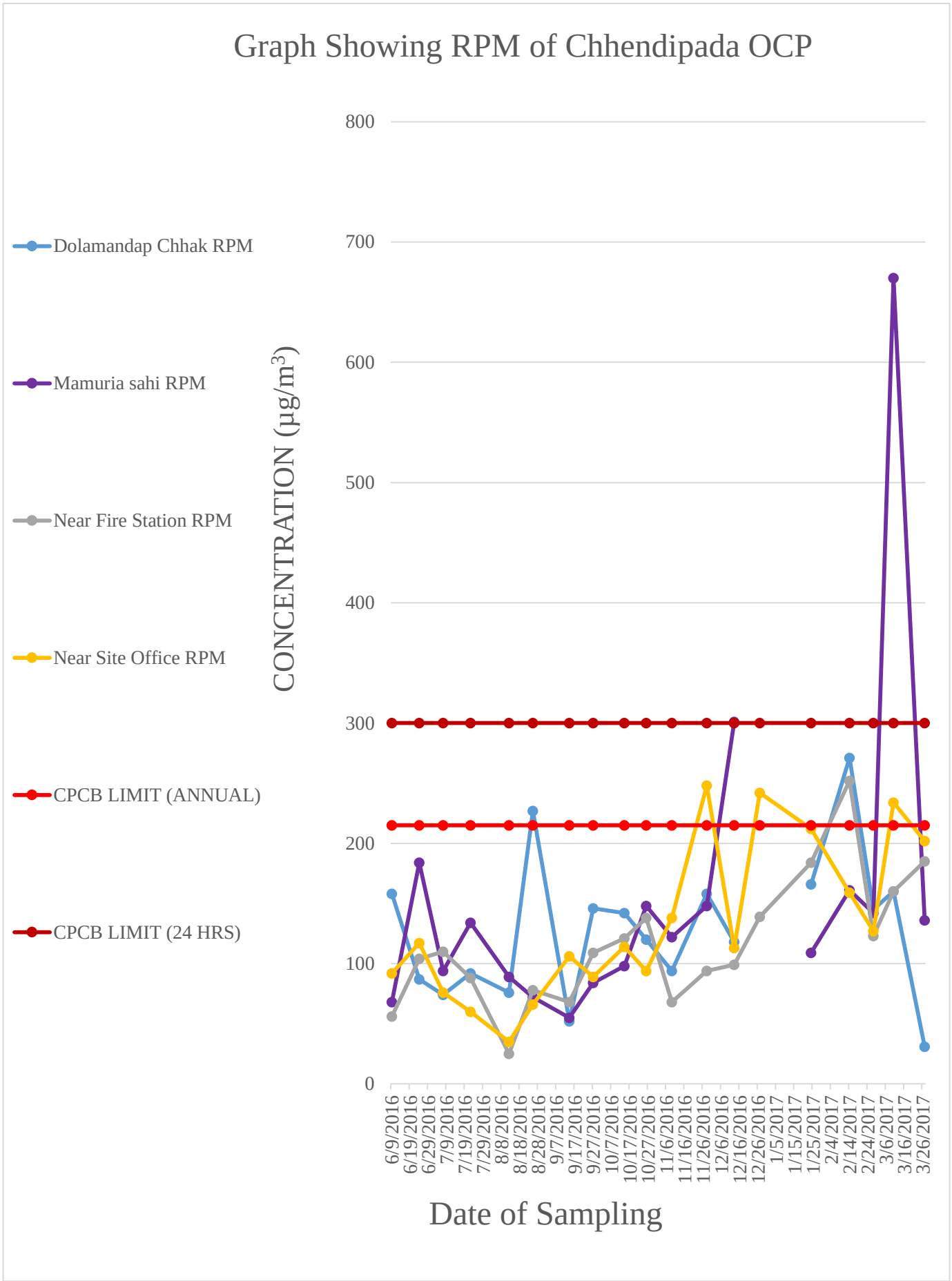
Table :21
Project: Chhendipada OCP
Monitoring Station: Near Fire Station

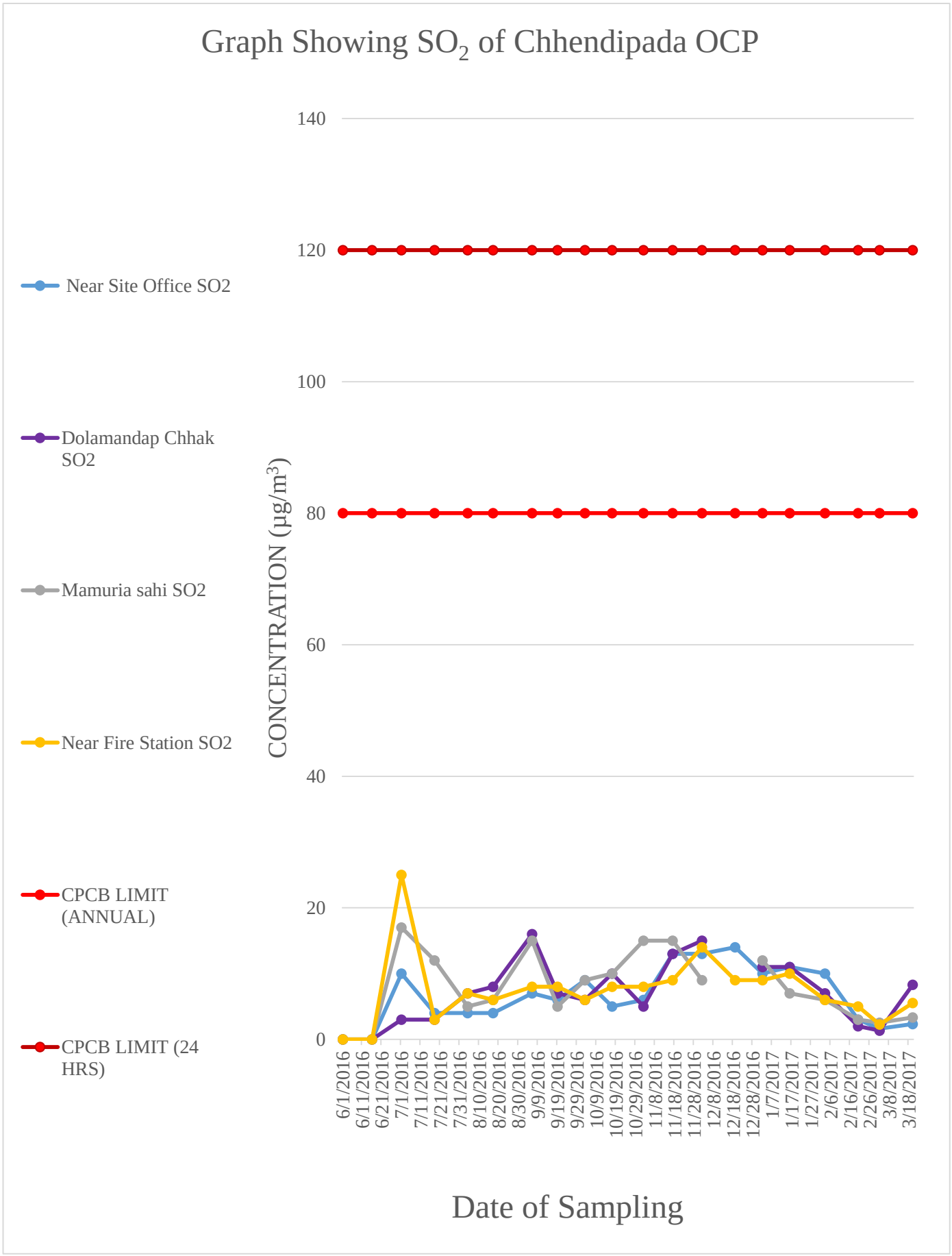
Date of Sampling	PM2.5	RPM	SO2	NOx	SPM	Remarks
01-06-2016	37	56	<25	11	112	East to West Suuny
16-06-2016	60	104	<25	13	155	South to north sunny
01-07-2016	68	110	25	6	230	East to west sunny and rainfall
18-07-2016	25	88	3	6	286	West to east cloudy and rainfall
04-08-2016	12	25	7	8	44	West to East rainfall
17-08-2016	20	78	6	12	119	East to West Sunny
06-09-2016	22	68	8	7	114	East to west cloudy & rainfall
19-09-2016	20	109	8	<6	157	East to west cloudy
03-10-2016	28	121	6	<6	182	East to west cloudy
17-10-2016	30	138	8	<6	226	East to west Sunny
02-11-2016	20	68	8	<6	112	North East to South West, Sunny
17-11-2016	28	94	9	<6	152	West to East, Sunny & Cloudy
02-12-2016	36	99	14	8	136	East to West, Sunny
19-12-2016	108	139	9	12	239	South to West, Sunny
02-01-2017	110	184	9	7	364	East to West, Sunny
16-01-2017	62	252	10	23	479	South to East, Sunny
03-02-2017	162	123	6	14	173	East to West, Sunny
20-02-2017	108	160	5	19	293	North to East, Sunny
03-03-2017	101	185	2.28	15	403	North to South, Sunny
20-03-2017	82	84	5.53	6	138	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	
Maximum	**162**	**252**	**25**	**23**	**479**	
Minimum	**12**	**25**	**2**	**6**	**44**	
Average	**56.95**	**114.25**	**8.27**	**11.13**	**205.70**	
95 Percentile	**112.60**	**188.35**	**15.65**	**20.20**	**406.80**	
98 Percentile	**142.24**	**226.54**	**21.26**	**21.88**	**450.12**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

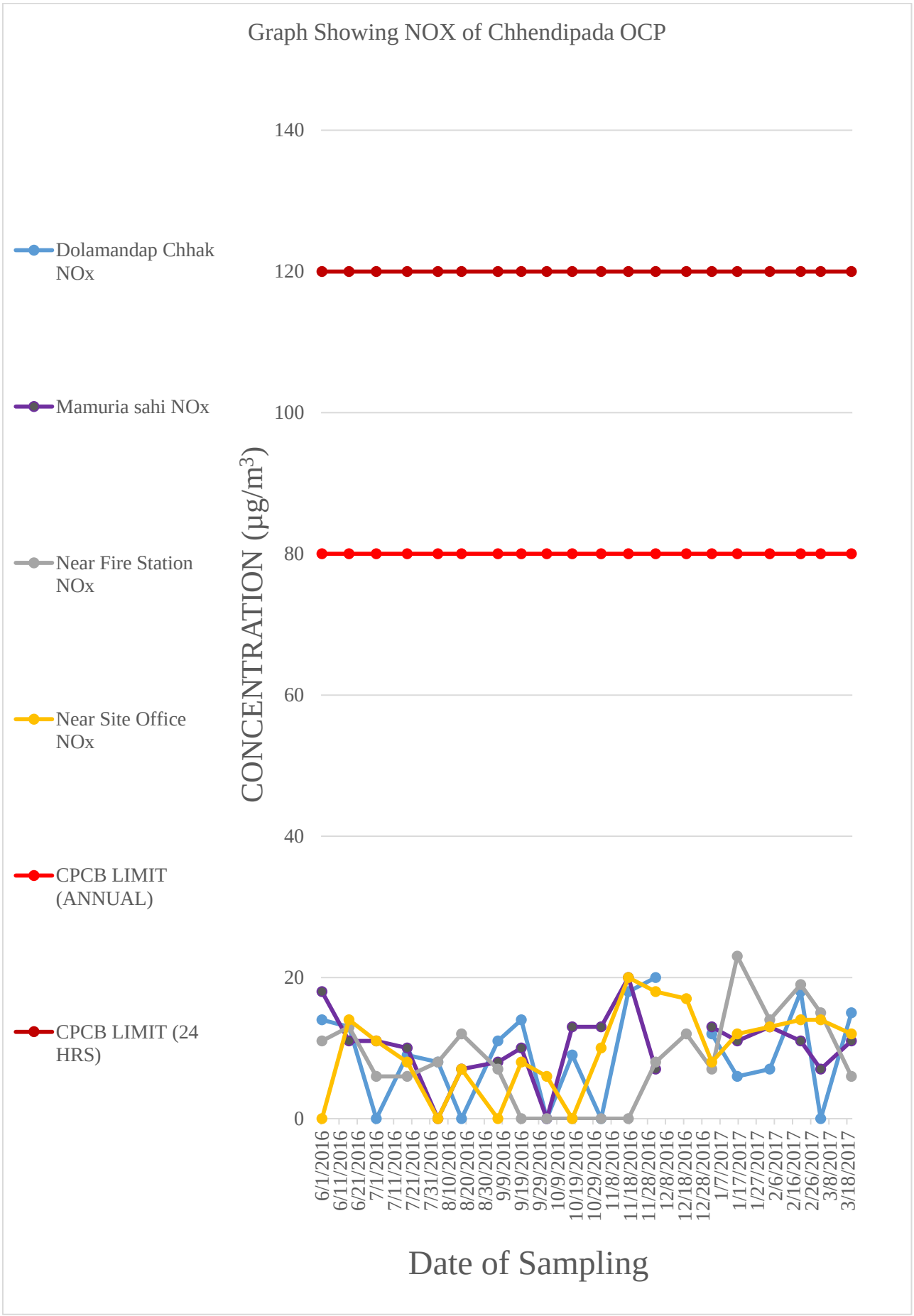
Table :22
Project: Chhendipada OCP
Monitoring Station: Near Site Office

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
01-06-2016	39	92	<25	<6	143	East to West Suuny
16-06-2016	56	117	<25	14	179	South to north sunny
01-07-2016	30	76	10	11	124	East to west sunny and rainfall
18-07-2016	26	60	4	8	108	West to east cloudy and rainfall
04-08-2016	17	35	4	<6	53	West to East rainfall
17-08-2016	23	66	4	7	104	East to West Sunny
06-09-2016	21	106	7	<6	172	East to west cloudy & rainfall
19-09-2016	22	89	6	8	143	East to west cloudy
03-10-2016	26	114	9	6	182	East to west cloudy
17-10-2016	18	94	5	<6	172	East to west Sunny
02-11-2016	28	138	6	10	245	North East to South West, Sunny
17-11-2016	48	248	13	20	402	West to East, Sunny & Cloudy
02-12-2016	76	113	13	18	147	East to West, Sunny
19-12-2016	44	242	14	17	268	South to West, Sunny
02-01-2017	104	212	10	8	263	East to West, Sunny
16-01-2017	104	159	11	12	288	South to East, Sunny
03-02-2017	119	127	10	13	213	East to West, Sunny
20-02-2017	80	234	3	14	500	North to East, Sunny
03-03-2017	115	202	1.64	14	390	North to South, Sunny
20-03-2017	90	91	2.35	12	234	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	
Maximum	**119**	**248**	**14**	**20**	**500**	
Minimum	**17**	**35**	**2**	**6**	**53**	
Average	**54.30**	**130.75**	**7.39**	**12.00**	**216.50**	
95 Percentile	**115.20**	**242.30**	**13.15**	**18.50**	**406.90**	
98 Percentile	**117.48**	**245.72**	**13.66**	**19.40**	**462.76**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing $PM_{2.5}$ of Chhendipada OCP
Dolamandap Chhak PM2 5
Mamuria sahi PM2 5
Near Fire Station PM2 5
Near Site Office PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
180
160
140
120
100
80
60
40
20
0
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling


Graph Showing RPM of Chhendipada OCP
Dolamandap Chhak RPM
Mamuria sahi RPM
Near Fire Station RPM
Near Site Office RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
800
700
600
500
400
300
200
100
0
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling


Graph Showing SO_2 of Chhendipada OCP
140
120
100
80
60
40
20
0
CONCENTRATION (µg/m3)
Near Site Office SO2
Dolamandap Chhak SO2
Mamuria sahi SO2
Near Fire Station SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling


Graph Showing NOX of Chhendipada OCP
Dolamandap Chhak NOx
Mamuria sahi NOx
Near Fire Station NOx
Near Site Office NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling

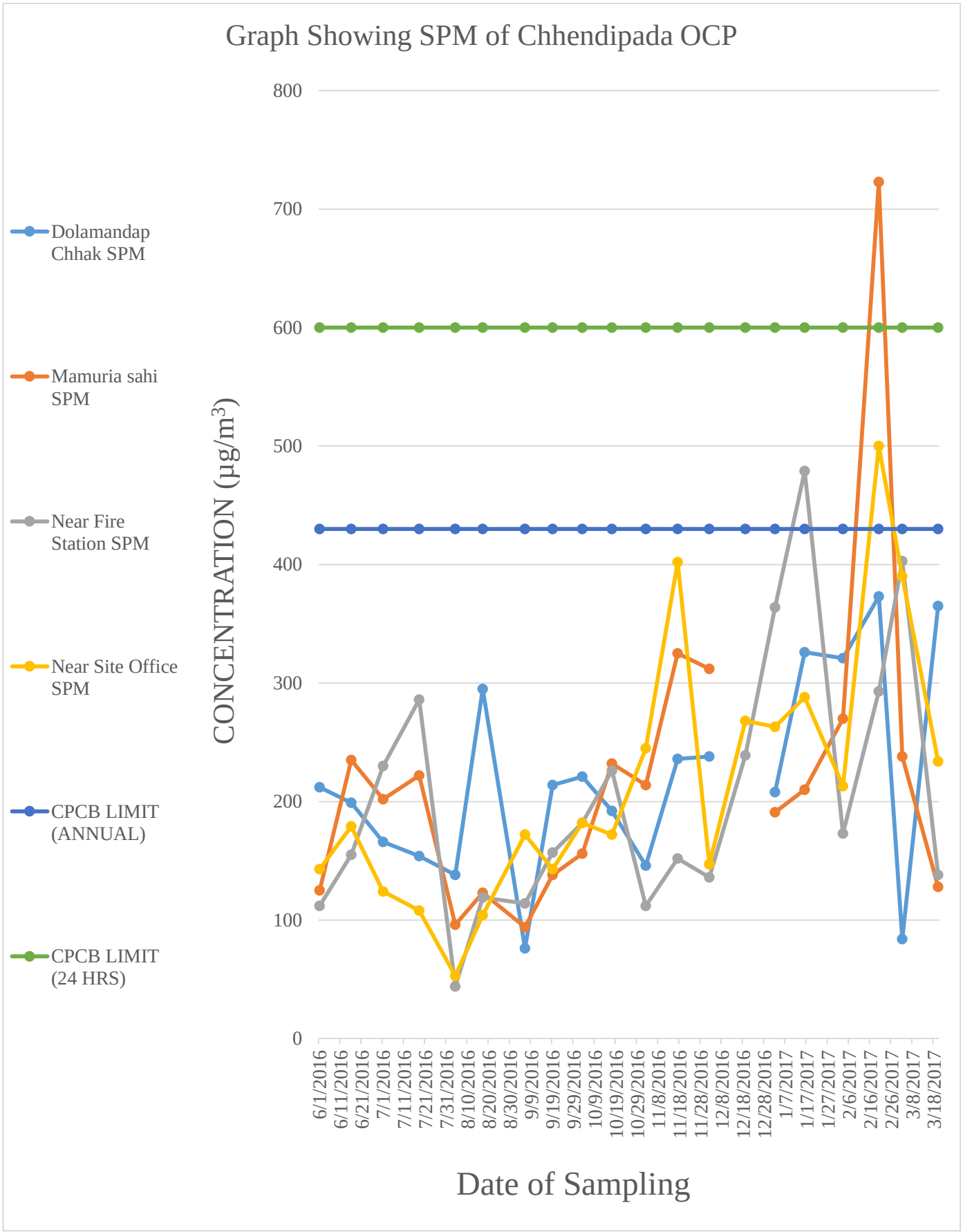

Graph Showing SPM of Chhendipada OCP
Dolamandap Chhak SPM
Mamuria sahi SPM
Near Fire Station SPM
Near Site Office SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
800
700
600
500
400
300
200
100
0
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling

Table : 23
Project: Lingaraj OCP
Monitoring Station: Lingaraj CGM Office

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
13-06-2016	66	154	<25	8	229	South to North Sunny
28-06-2016	27	108	<25	<6	153	East to West sunny, evening rainfall
13-07-2016	48	129	12	20	227	East to West sunny and rainfall
28-07-2016	56	122	10	13	206	West to east cloudy and rainfall
05-08-2016	26	47	7	13	65	East to west rainfall
18-08-2016	56	78	9	<6	104	South to north Sunny
07-09-2016	42	118	7	6	278	West to East cloudy
20-09-2016	38	108	4	10	266	East to west Rainfall
14-10-2016	50	238	7	9	386	East to west Sunny
27-10-2016	49	174	15	18	288	West to East Sunny
14-11-2016	36	112	17	21	359	North East to South West, Sunny
28-11-2016	58	284	14	30	553	West to East, Sunny & Cloudy
13-12-2016	88	272	19	24	606	East to West, Sunny
29-12-2016	113	204	26	28	457	South to West, Sunny
12-01-2017	62	296	8	12	475	North to South, Sunny
27-01-2017	95	336	10	6	527	East to West, Cloudy
13-02-2017	200	236	8	11	606	North to South, Sunny
27-02-2017	230	604	13	15	986	East to West, Sunny
14-03-2017	72	246	16.49	20	450	South to West, Sunny
29-03-2017	79	338	5.96	<6	571	South to North, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**230**	**604**	**26**	**30**	**986**	
Minimum	**26**	**47**	**4**	**6**	**65**	
Average	**74.55**	**210.20**	**11.58**	**15.53**	**389.60**	
95 Percentile	**201.50**	**351.30**	**20.05**	**28.40**	**625.00**	
98 Percentile	**218.60**	**502.92**	**23.62**	**29.36**	**841.60**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 24
Project: Lingaraj OCP
Monitoring Station: Near Shiva Temple

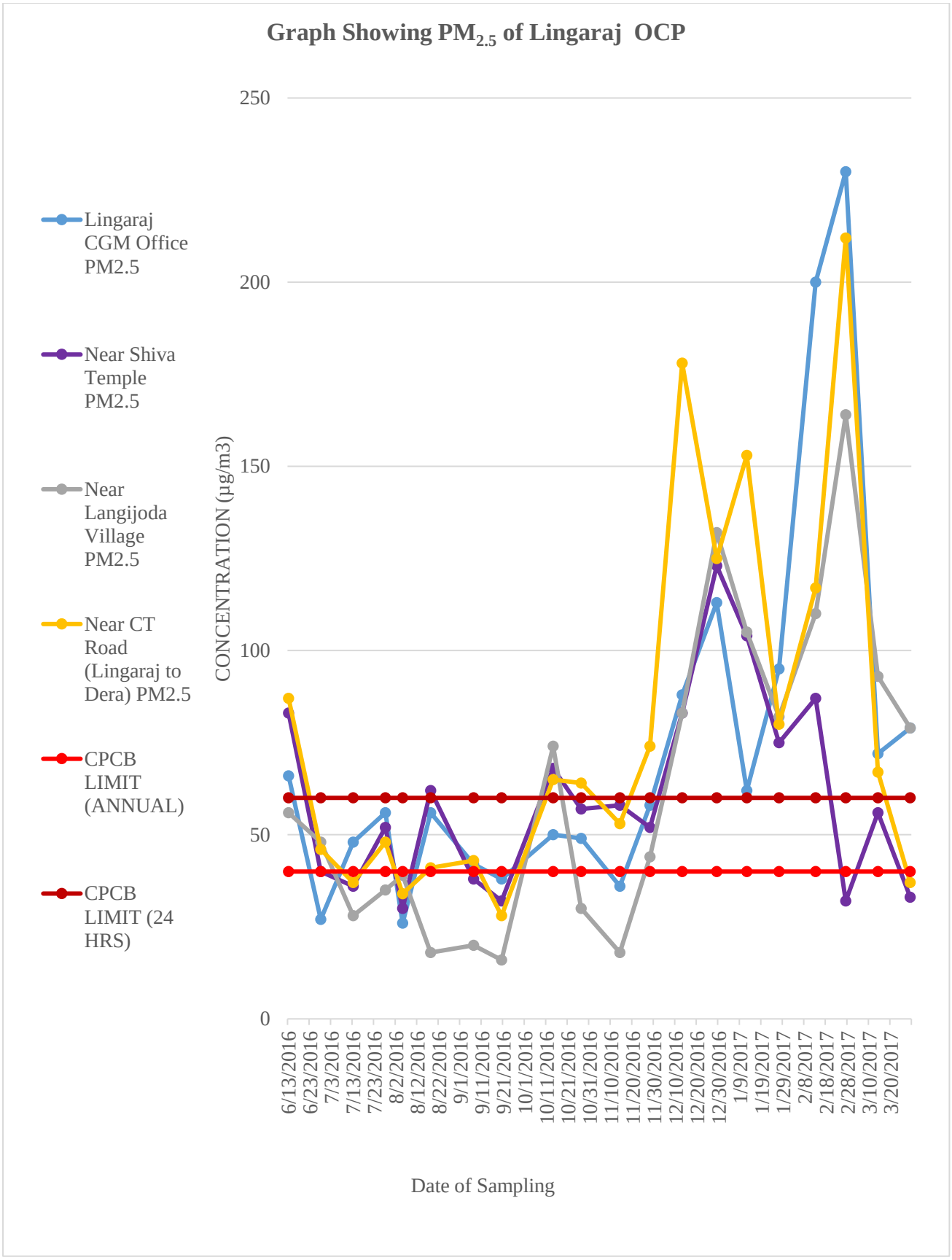
Date of Sampling	$PM_{2.5}$	RPM	SO2	NOx	SPM	Remarks
13-06-2016	83	344	<25	13	594	South to North Sunny
28-06-2016	40	152	<25	11	228	East to West sunny, evening rainfall
13-07-2016	36	74	2	21	166	East to West sunny and rainfall
28-07-2016	52	142	1	11	254	West to east cloudy and rainfall
08-08-2016	30	70	5	14	102	West to east rainfall
19-08-2016	62	138	11	8	206	South to north Sunny
08-09-2016	38	168	10	<6	262	East to west sunny & cloudy
21-09-2016	32	140	6	9	218	East to west Rainfall
13-10-2016	68	234	6	10	426	West to East Sunny
27-10-2016	57	268	20	23	446	West to East Sunny
11-11-2016	58	284	25	29	402	North East to South West, Sunny
29-11-2016	52	302	28	32	618	East to West, Sunny & Cloudy
14-12-2016	83	274	15	23	582	West to East, Sunny
29-12-2016	123	371	22	19	555	South to West, Sunny
12-01-2017	104	271	6	14	382	North to South, Sunny
27-01-2017	75	197	8	21	510	East to West, Cloudy
13-02-2017	87	181	22	8	269	North to South, Sunny
27-02-2017	32	303	4	9	514	East to West, Sunny
14-03-2017	56	67	11.97	14	220	South to West, Sunny
29-03-2017	33	215	2.27	6	506	South to North, Sunny
Brief Statistics	**$PM_{2.5}$**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**123**	**371**	**28**	**32**	**618**	
Minimum	**30**	**67**	**1**	**6**	**102**	
Average	**60.05**	**209.75**	**11.40**	**15.53**	**373.00**	
95 Percentile	**104.95**	**345.35**	**25.45**	**29.30**	**595.20**	
98 Percentile	**115.78**	**360.74**	**26.98**	**30.92**	**608.88**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 25
Project: Lingaraj OCP
Monitoring Station: Near Langijoda Village

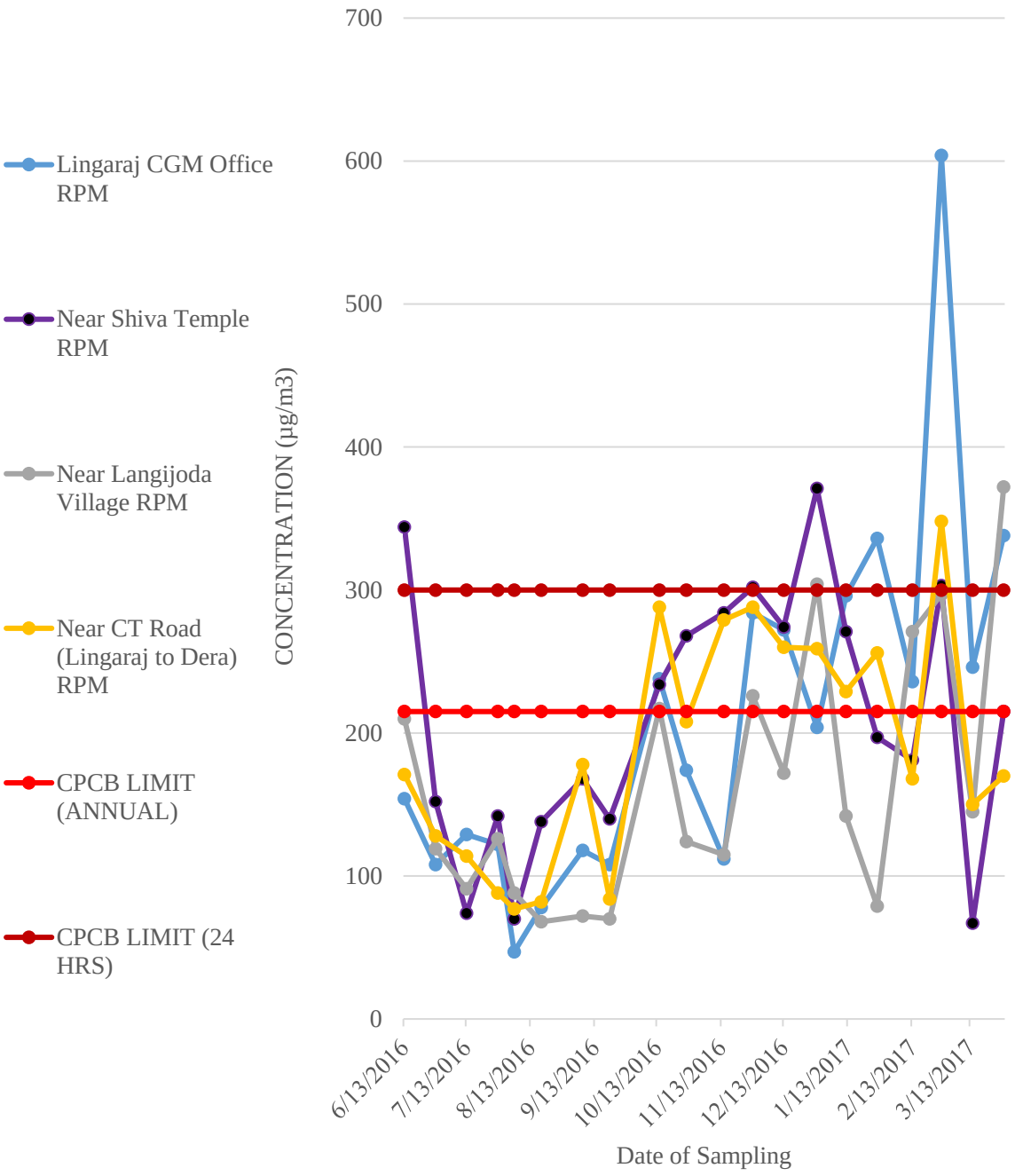
Date of Sampling	$PM_{2.5}$	RPM	SO2	NOx	SPM	Remarks
13-06-2016	56	210	<25	<6	375	South to North Sunny
28-06-2016	48	119	<25	14	251	East to West sunny, evening rainfall
13-07-2016	28	91	7	9	213	East to West sunny and rainfall
28-07-2016	35	126	21	15	214	West to east cloudy and rainfall
05-08-2016	39	88	6	13	118	East to west rainfall
18-08-2016	18	68	5	6	86	South to north Sunny
07-09-2016	20	72	10	<6	110	West to East cloudy
20-09-2016	16	70	4	9	108	East to west Rainfall
14-10-2016	74	217	10	<6	322	East to west Sunny
27-10-2016	30	124	10	12	194	West to East Sunny
14-11-2016	18	115	20	14	267	North East to South West, Sunny
28-11-2016	44	226	14	25	334	West to East, Sunny & Cloudy
13-12-2016	83	172	19	26	278	East to West, Sunny
29-12-2016	132	304	15	18	460	South to West, Sunny
12-01-2017	105	142	9	17	527	North to South, Sunny
27-01-2017	82	79	7	16	217	East to West, Cloudy
13-02-2017	110	271	42	16	521	North to South, Sunny
27-02-2017	164	297	8	17	548	East to West, Sunny
14-03-2017	93	145	2.95	13	328	South to West, Sunny
29-03-2017	79	372	3.29	6	719	South to North, Sunny
Brief Statistics	**$PM_{2.5}$**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**164**	**372**	**42**	**26**	**719**	
Minimum	**16**	**68**	**2.95**	**6**	**86**	
Average	**63.70**	**165.40**	**11.85**	**14.47**	**309.50**	
95 Percentile	**133.60**	**307.40**	**24.15**	**25.20**	**556.55**	
98 Percentile	**151.84**	**346.16**	**34.86**	**25.68**	**654.02**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

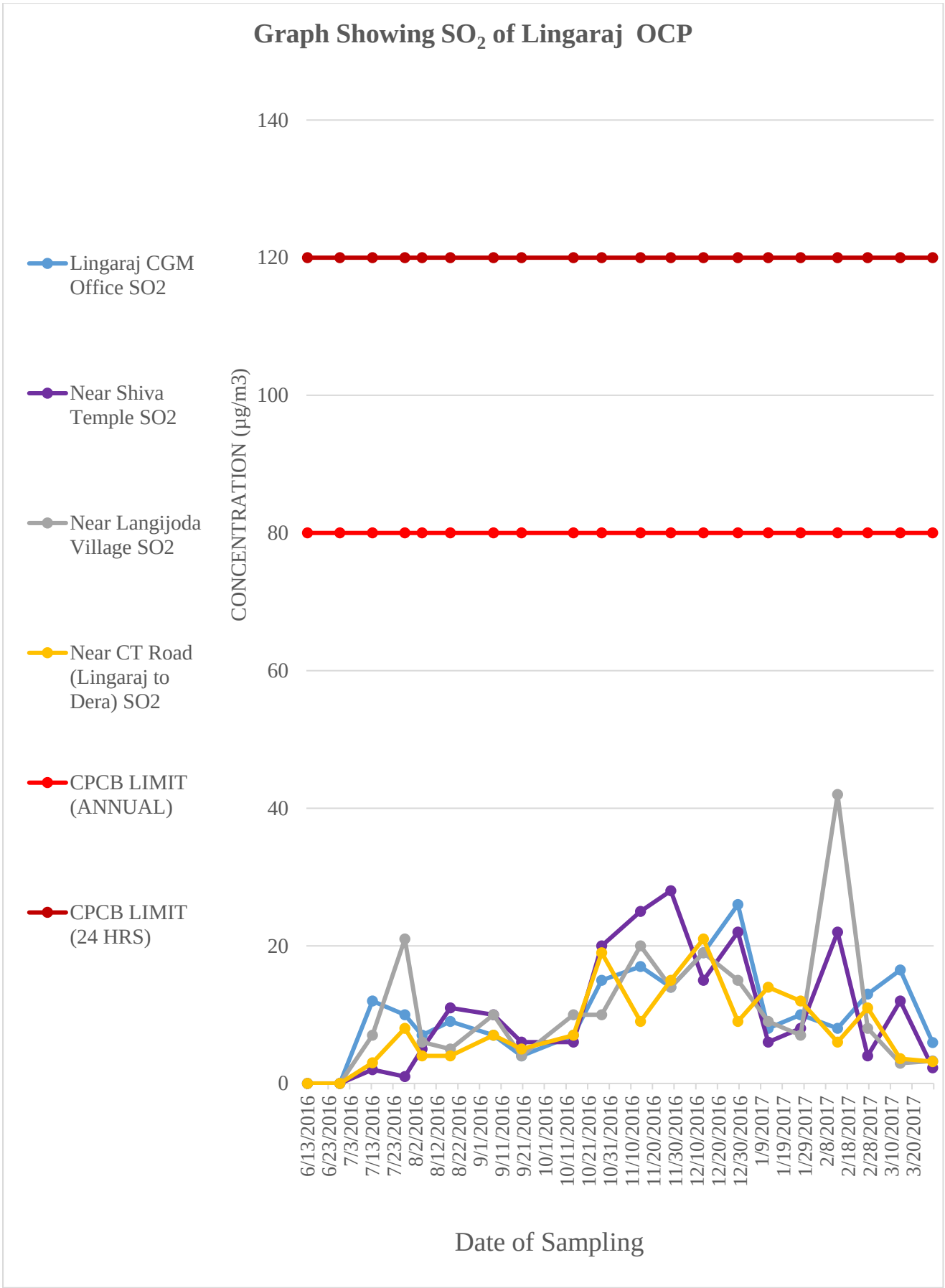
Table : 26
Project: Lingaraj OCP
Monitoring Station: Near CT Road (Lingaraj to Dera)

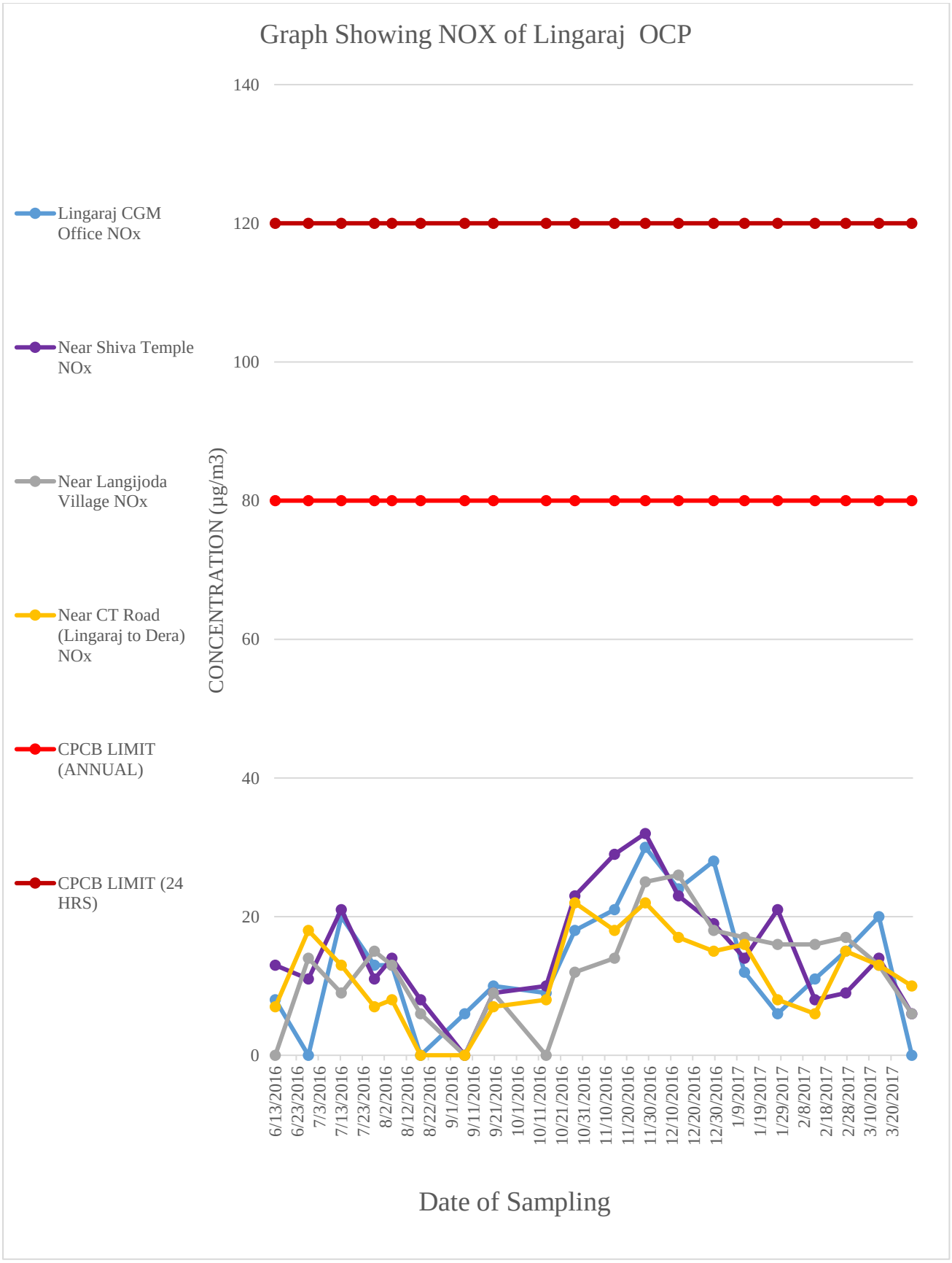
Date of Sampling	$PM_{2.5}$	RPM	SO2	NOx	SPM	Remarks
13-06-2016	87	171	<25	7	266	South to North Sunny
28-06-2016	46	128	<25	18	221	East to West sunny, evening rainfall
13-07-2016	37	114	3	13	212	East to West sunny and rainfall
28-07-2016	48	88	8	7	134	West to east cloudy and rainfall
08-08-2016	34	77	4	8	94	West to east rainfall
19-08-2016	41	82	4	<6	110	South to north Sunny
08-09-2016	43	178	7	<6	266	East to west sunny & cloudy
21-09-2016	28	84	5	7	128	East to west Rainfall
13-10-2016	65	288	7	8	426	West to East Sunny
27-10-2016	64	208	19	22	436	West to East Sunny
11-11-2016	53	279	9	18	460	North East to South West, Sunny
29-11-2016	74	288	15	22	542	East to West, Sunny & Cloudy
14-12-2016	178	260	21	17	412	West to East, Sunny
29-12-2016	125	259	9	15	354	South to West, Sunny
12-01-2017	153	229	14	16	354	North to South, Sunny
27-01-2017	80	256	12	8	360	East to West, Cloudy
13-02-2017	117	168	6	6	247	North to South, Sunny
25-02-2017	212	348	11	15	587	East to West, Sunny
14-03-2017	67	150	3.61	13	166	South to West, Sunny
29-03-2017	37	170	3.18	10	459	South to North, Sunny
Brief Statistics	**$PM_{2.5}$**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**212**	**348**	**21**	**22**	**587**	
Minimum	**28**	**77**	**3**	**6**	**94**	
Average	**79.45**	**191.25**	**8.93**	**12.78**	**311.70**	
95 Percentile	**179.70**	**291.00**	**19.30**	**22.00**	**544.25**	
98 Percentile	**199.08**	**325.20**	**20.32**	**22.00**	**569.90**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

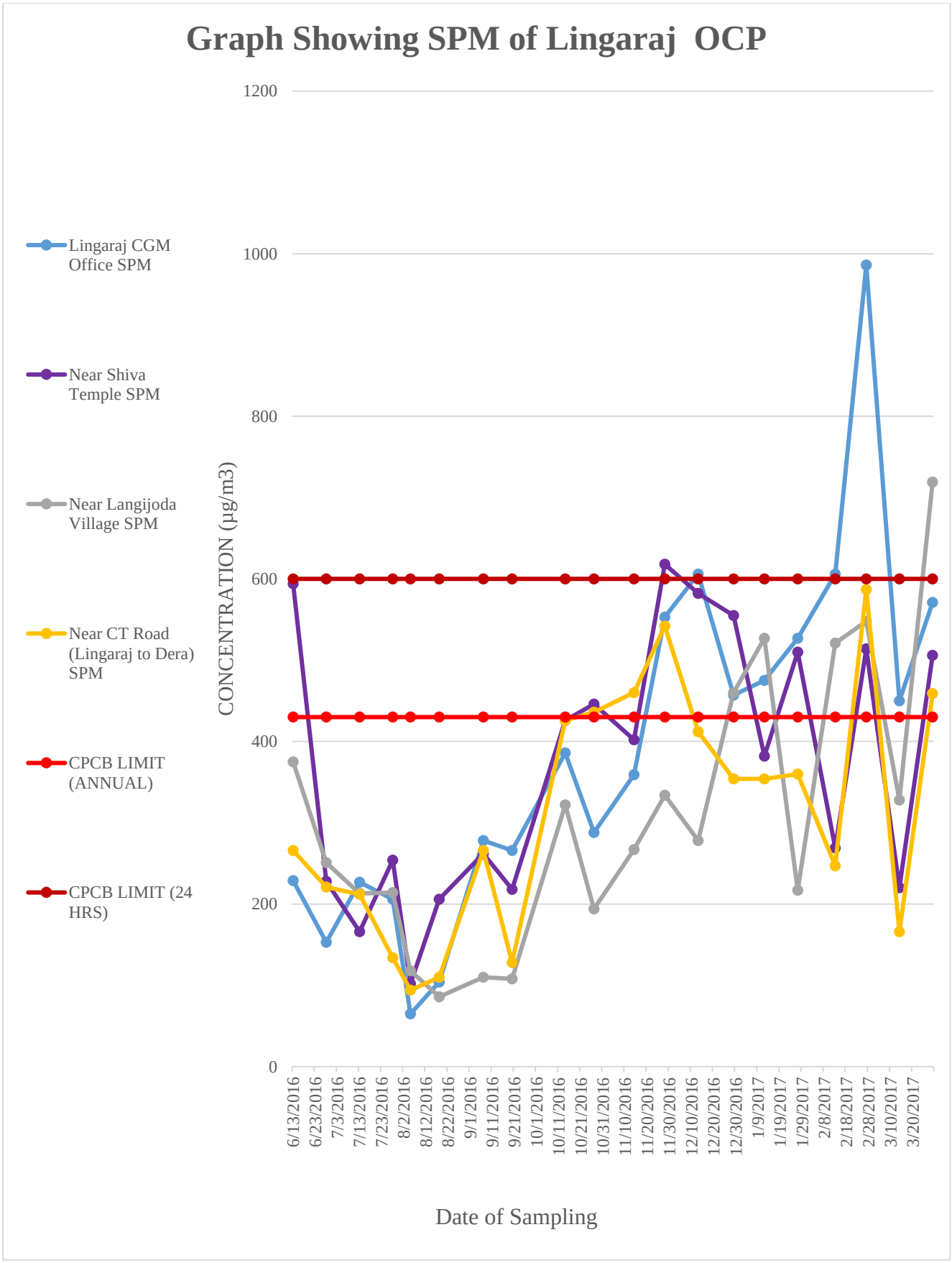

Graph Showing PM2.5 of Lingaraj OCP
Lingaraj CGM Office PM2.5
Near Shiva Temple PM2.5
Near Langijoda Village PM2.5
Near CT Road (Lingaraj to Dera) PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
250
200
150
100
50
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Graph Showing RPM of Lingaraj OCP




Graph Showing SO_2 of Lingaraj OCP
Lingaraj CGM Office SO2
Near Shiva Temple SO2
Near Langijoda Village SO2
Near CT Road (Lingaraj to Dera) SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling


Graph Showing NOX of Lingaraj OCP
Lingaraj CGM Office NOx
Near Shiva Temple NOx
Near Langijoda Village NOx
Near CT Road (Lingaraj to Dera) NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling


Graph Showing SPM of Lingaraj OCP
Lingaraj CGM Office SPM
Near Shiva Temple SPM
Near Langijoda Village SPM
Near CT Road (Lingaraj to Dera) SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
1200
1000
800
600
400
200
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
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11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table : 27
Project: Kaniha OCP
Monitoring Station: Near Z-patch

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
06-06-2016	84	298	<25	9	561	West to East Sunny
21-06-2016	48	146	<25	<6	266	East to west sunny
11-07-2016	48	96	7	11	204	West to east sunny and rainfall
26-07-2016	23	78	24	9	124	East to west cloudy and rainfall
10-08-2016	21	64	6	9	130	South to North rainfall
23-08-2016	28	84	6	<6	153	North to South Sunny
12-09-2016	22	163	7	<6	297	South to North cloudy
26-09-2016	40	136	8	12	208	South to north cloudy
07-10-2016	34	168	5	<6	254	East to west cloudy & rainfall
21-10-2016	74	194	22	26	332	West to East Sunny
07-11-2016	74	348	30	32	736	North East to South West, Sunny
22-11-2016	78	314	29	35	632	West to East, Sunny & Cloudy
05-12-2016	95	296	18	24	501	West to East, Coudy
20-12-2016	60	200	15	18	342	South to West, Sunny
03-01-2017	112	128	8	18	217	South to North Sunny
17-01-2017	91	565	9	13	973	East to West, Sunny
02-02-2017	119	236	4	7	602	North to South, Sunny
17-02-2017	91	455	14	17	788	North to South, Sunny
02-03-2017	160	321	5.28	15	435	North to South, Sunny
17-03-2017	114	207	4.29	36	367	North to South, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**160**	**565**	**30**	**36**	**973**	
Minimum	**21.00**	**64.00**	**4.00**	**7.00**	**124.00**	
Average	**70.80**	**224.85**	**12.31**	**18.19**	**406.10**	
95 Percentile	**121.05**	**460.50**	**29.15**	**35.25**	**797.25**	
98 Percentile	**144.42**	**523.20**	**29.66**	**35.70**	**902.70**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 28
Project: Kaniha OCP
Monitoring Station: Project Office

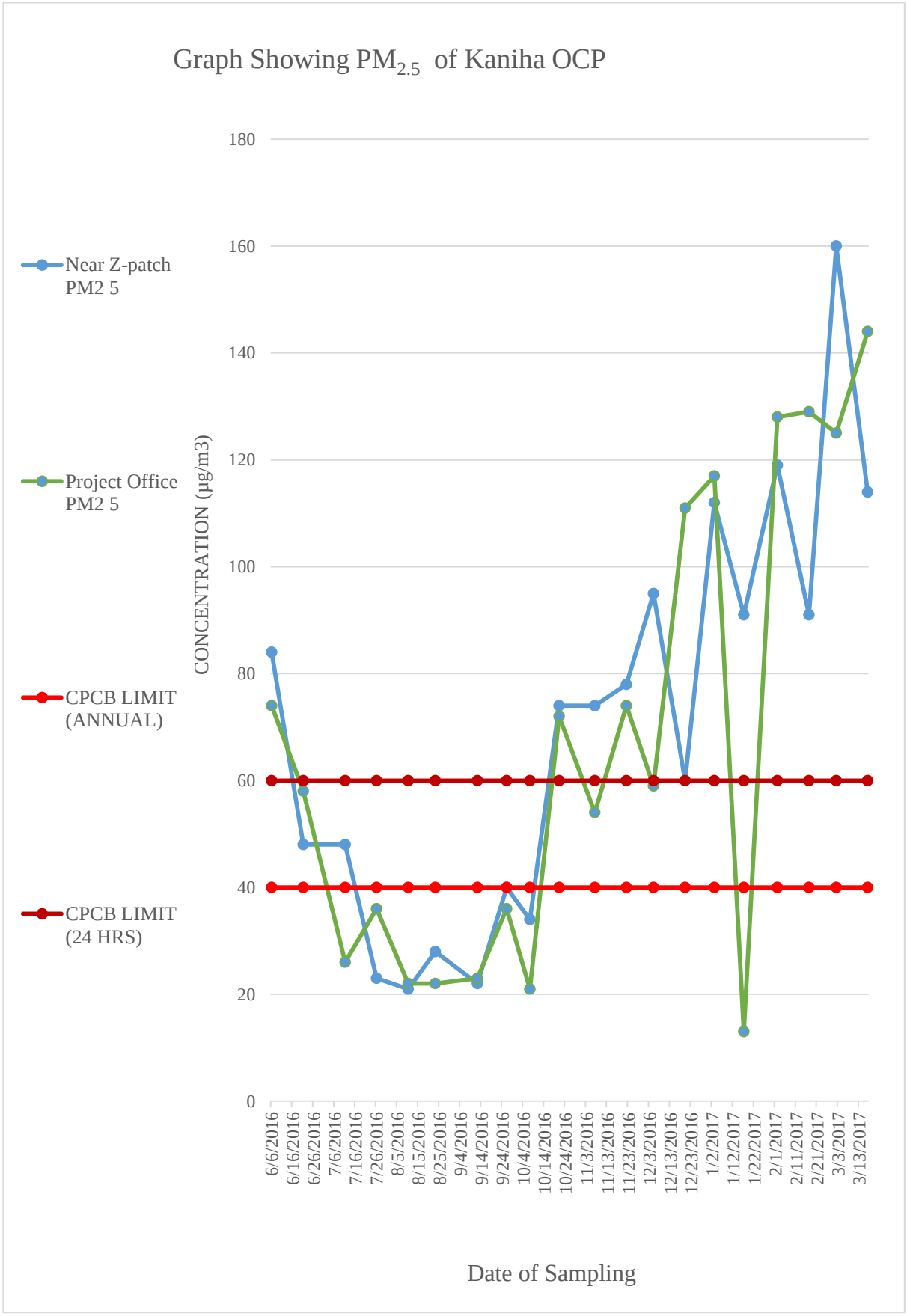
Date of Sampling	$PM_{2.5}$	RPM	SO_2	NOx	SPM	Remarks
06-06-2016	74	234	27	14	478	West to East Sunny
21-06-2016	58	188	<25	8	266	East to west sunny
11-07-2016	26	98	13	13	218	West to east sunny and rainfall
26-07-2016	36	149	10	<6	256	East to west cloudy and rainfall
10-08-2016	22	46	8	8	58	South to North rainfall
23-08-2016	22	74	6	<6	104	North to South Sunny
12-09-2016	23	58	10	<6	106	South to North cloudy
26-09-2016	36	118	10	15	186	South to north cloudy
07-10-2016	21	86	19	6	126	East to west cloudy & rainfall
21-10-2016	72	234	15	20	382	West to East Sunny
07-11-2016	54	288	19	20	465	North East to South West, Sunny
22-11-2016	74	303	29	33	624	West to East, Sunny & Cloudy
05-12-2016	59	74	8	13	191	West to East, Coudy
20-12-2016	111	178	10	15	262	South to West, Sunny
03-01-2017	117	147	9	21	229	South to North Sunny
17-01-2017	13	136	8	9	289	East to West, Sunny
02-02-2017	128	225	6	9	524	North to South, Sunny
17-02-2017	129	155	9	14	406	North to South, Sunny
02-03-2017	125	281	3.12	9	358	North to South, Sunny
17-03-2017	144	146	5.13	18	329	North to South, Sunny
Brief Statistics	**$PM_{2.5}$**	**RPM**	**SO_2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**144**	**303**	**29**	**33**	**624**	
Minimum	**13.00**	**46.00**	**3.12**	**6.00**	**58.00**	
Average	**67.20**	**160.90**	**11.80**	**14.41**	**292.85**	
95 Percentile	**129.75**	**288.75**	**27.20**	**23.40**	**529.00**	
98 Percentile	**138.30**	**297.30**	**28.28**	**29.16**	**586.00**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

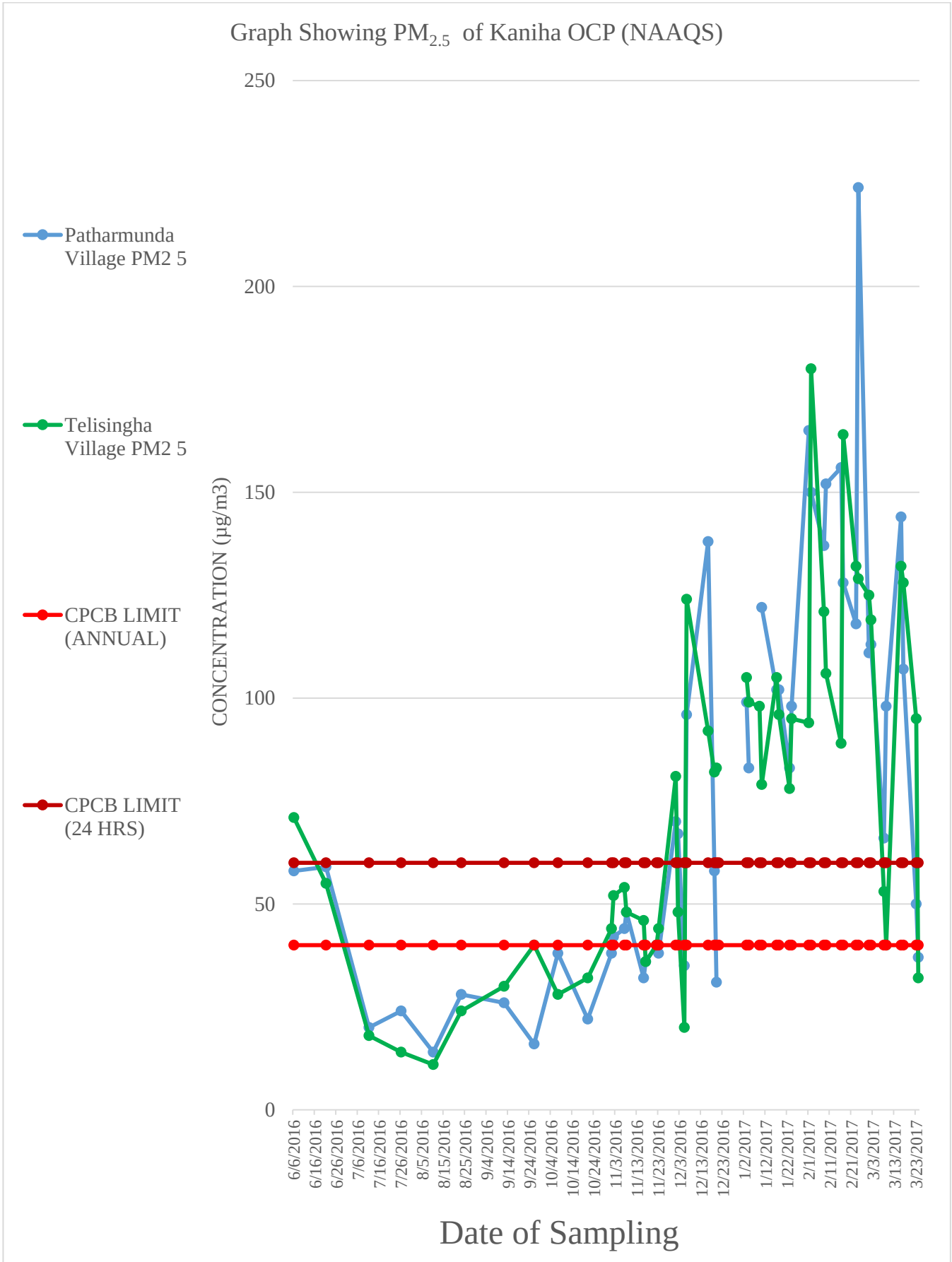
Table : 28
Project: Kaniha OCP
Monitoring Station: Patharmunda Village

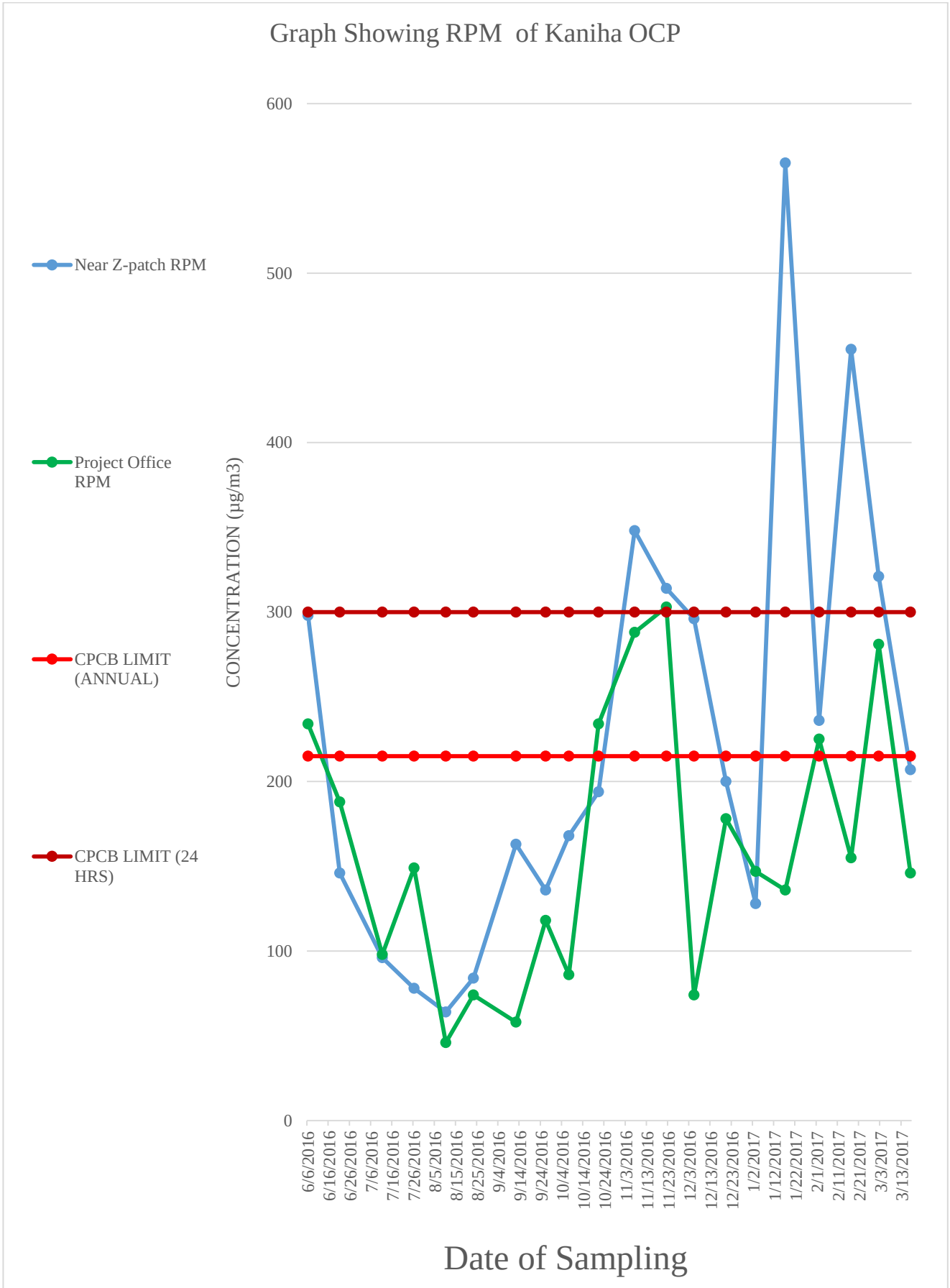
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
06-06-2016	58	168	<25	9	234	West to East Sunny
21-06-2016	59	128	<25	7	241	East to west sunny
11-07-2016	20	71	23	<6	165	West to east sunny and rainfall
26-07-2016	24	70	12	8	133	East to west cloudy and rainfall
10-08-2016	14	34	5	9	43	South to North rainfall
23-08-2016	28	78	11	10	133	North to South Sunny
12-09-2016	26	88	10	7	159	South to North cloudy
26-09-2016	16	94	11	14	132	South to north cloudy
07-10-2016	38	130	6	<6	222	East to west cloudy & rainfall
21-10-2016	22	120	16	23	254	West to East Sunny
01-11-2016	38	156	15	18	234	North East to South West, Sunny
02-11-2016	42	176	9	11	300	North East to South West, Sunny
07-11-2016	44	166	15	19	324	North East to South West, Sunny
08-11-2016	48	197	20	18	375	North East to South West, Sunny
16-11-2016	32	138	11	8	291	West to East, Sunny & Cloudy
17-11-2016	36	154	10	12	299	West to East, Sunny & Cloudy
22-11-2016	40	170	19	22	364	West to East, Sunny & Cloudy
23-11-2016	38	192	18	14	288	East to West, Sunny & Cloudy
01-12-2016	70	92	18	15	222	East to West, Sunny
02-12-2016	67	109	21	24	308	East to West, Sunny
05-12-2016	35	126	15	20	206	West to East, Cloudy
06-12-2016	96	248	16	19	274	East to West, Sunny
16-12-2016	138	319	7	<6	427	South to West, Sunny
19-12-2016	58	104	6	12	158	South to West, Sunny
20-12-2016	31	109	6	10	244	South to West, Sunny
21-12-2016						Sampler Breakdown
03-01-2017	99	140	8	18	215	South to North Sunny
04-01-2017	83	194	12	21	348	West to East Sunny
09-01-2017		209	21	24	369	West to East, Cloudy & PM2.5 Sampler Break Down
10-01-2017	122	181	9	17	244	South to North Cloudy
17-01-2017	102	173	14	18	228	East to West, Sunny
18-01-2017	102	216	6	15	328	East to West, Sunny
23-01-2017	83	236	8	21	292	South to West, Sunny
24-01-2017	98	199	7	12	323	East to South, Sunny
01-02-2017	165	235	8	8	463	East to West, Sunny
02-02-2017	150	145	7	15	221	North to South, Sunny
08-02-2017	137	251	9	20	551	North to South, Sunny
09-02-2017	152	195	8	7	472	South to West Sunny
16-02-2017	156	122	4	19	440	West to East Sunny
17-02-2017	128	150	5	13	200	North to South, Sunny
23-02-2017	118	145	3	29	328	West to East Sunny
24-02-2017	224	162	3	18	427	North to South, Sunny
01-03-2017	111	206	1.39	12	307	East to West, Sunny
02-03-2017	113	197	4.15	17	300	North to South, Sunny
08-03-2017	66	76	6.55	14	149	South to North, Rainfall
09-03-2017	98	105	3.6	<6	201	East to West, Rainfall
16-03-2017	144	168	8.79	15	275	West to East, Sunny
17-03-2017	107	109	4.21	12	235	North to South, Sunny
23-03-2017	50	173	2.36	12	313	South to North, Sunny
24-03-2017	37	106	2.75	23	162	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	**All values in µg/m3**
Maximum	**224**	**319**	**23**	**29**	**551**	
Minimum	**14.00**	**34.00**	**1.39**	**7.00**	**43.00**	
Average	**78.40**	**153.67**	**9.91**	**15.31**	**273.90**	
95 Percentile	**154.60**	**243.20**	**20.70**	**23.80**	**453.80**	
98 Percentile	**168.54**	**253.72**	**21.16**	**24.60**	**475.16**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

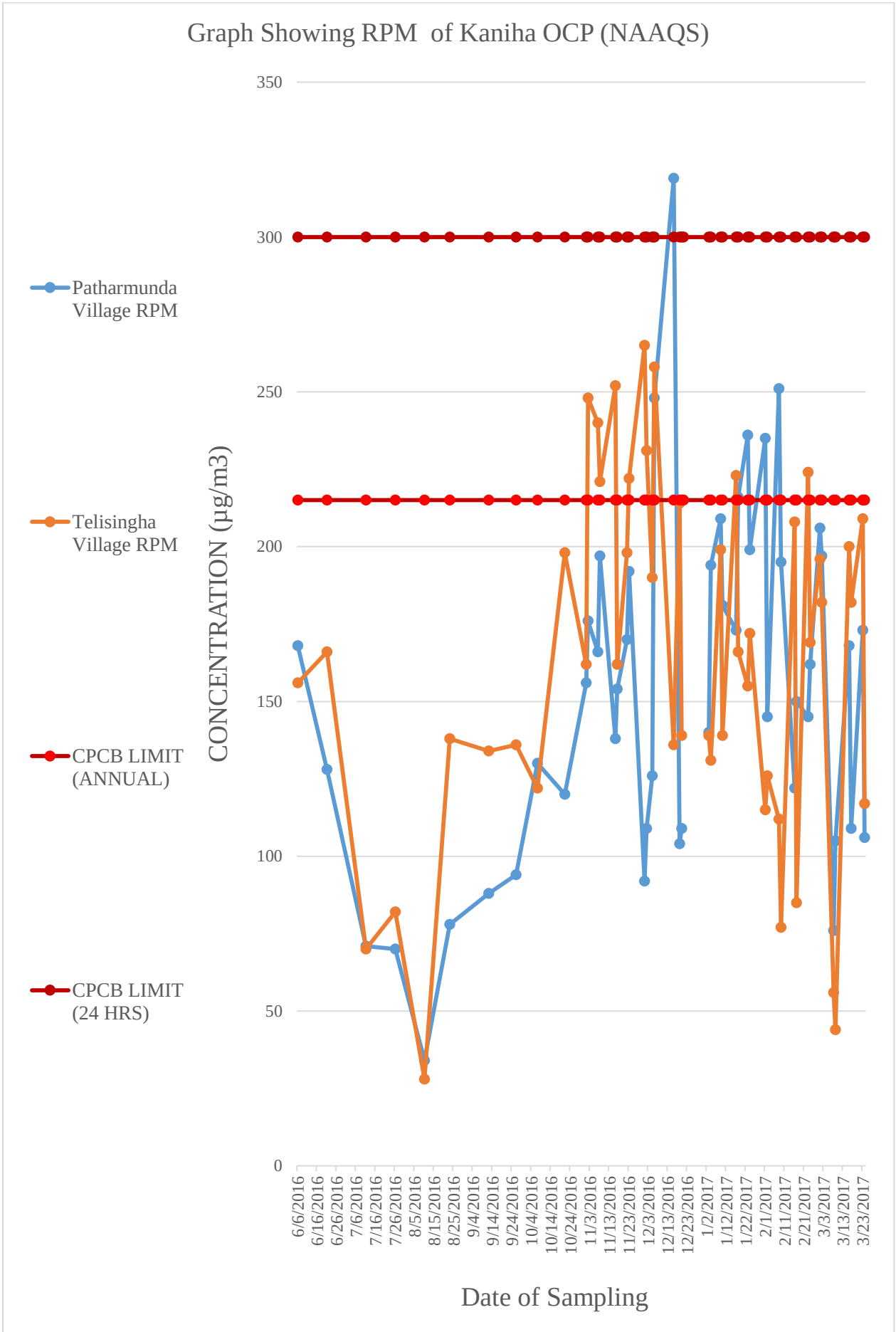
Table : 29
Project: Kaniha OCP
Monitoring Station: Telisingha Village

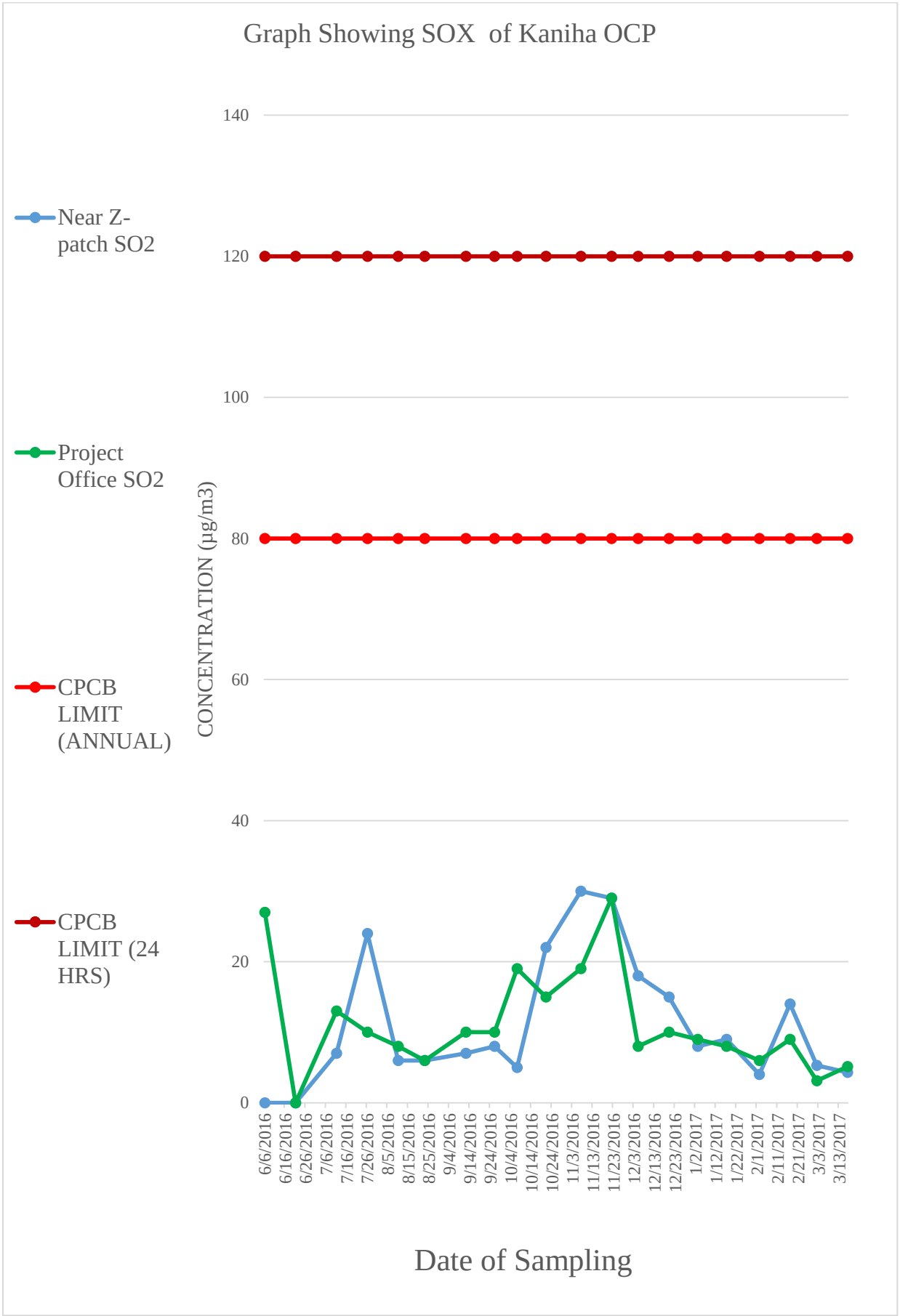
Date of Sampling	$PM_{2.5}$	RPM	SO_2	NOx	SPM	Remarks
06-06-2016	71	156	<25	20	252	West to East Sunny
21-06-2016	55	166	<25	13	336	East to west sunny
11-07-2016	18	70	9	11	148	West to east sunny and rainfall
26-07-2016	14	82	28	9	128	East to west cloudy and rainfall
10-08-2016	11	28	3	<6	42	South to North rainfall
23-08-2016	24	138	8	17	206	North to South Sunny
12-09-2016	30	134	5	10	202	South to North cloudy
26-09-2016	40	136	5	8	210	South to north cloudy
07-10-2016	28	122	10	6	202	East to west cloudy & rainfall
21-10-2016	32	198	17	21	346	West to East Sunny
01-11-2016	44	162	24	27	375	North East to South West, Sunny
02-11-2016	52	248	14	24	456	North East to South West, Sunny
07-11-2016	54	240	24	18	374	North East to South West, Sunny
08-11-2016	48	221	29	31	469	North East to South West, Sunny
16-11-2016	46	252	20	24	543	West to East, Sunny & Cloudy
17-11-2016	36	162	18	15	334	West to East, Sunny & Cloudy
22-11-2016	40	198	14	16	362	West to East, Sunny & Cloudy
23-11-2016	44	222	18	17	426	East to West, Sunny & Cloudy
01-12-2016	81	265	14	17	269	East to West, Sunny
02-12-2016	48	231	17	16	407	East to West, Sunny
05-12-2016	20	190	13	15	228	West to East, Coudy
06-12-2016	124	258	14	17	309	East to West, Sunny
16-12-2016	92	136	8	<6	192	South to West, Sunny
19-12-2016	82	214	12	16	247	South to West, Sunny
20-12-2016	83	139	10	9	245	South to West, Sunny
21-12-2016						Sampler breakdown
03-01-2017	105	139	10	16	244	South to North Sunny
04-01-2017	99	131	12	18	428	West to East Sunny
09-01-2017	98	199	9	22	391	West to East, Cloudy
10-01-2017	79	139	8	15	403	South to North Cloudy
17-01-2017	105	223	16	15	541	East to West, Sunny
18-01-2017	96	166	7	7	254	East to West, Sunny
23-01-2017	78	155	14	21	420	South to West, Sunny
24-01-2017	95	172	7	<6	404	East to South, Sunny
01-02-2017	94	115	6	12	266	East to West, Sunny
02-02-2017	180	126	4	7	279	North to South, Sunny
08-02-2017	121	112	11	11	369	North to South, Sunny
09-02-2017	106	77	8	13	311	South to West Sunny
16-02-2017	89	208	20	22	366	West to East Sunny
17-02-2017	164	85	2	22	129	North to South, Sunny
23-02-2017	132	224	5	8	670	West to East Sunny
24-02-2017	129	169	5	13	420	North to South, Sunny
01-03-2017	125	196	1.62	12	376	East to West, Sunny
02-03-2017	119	182	2.28	8	268	North to South, Sunny
08-03-2017	53	56	3.44	11	131	South to North, Rainfall
09-03-2017	40	44	5.09	9	104	East to West, Rainfall
16-03-2017	132	200	4.08	10	308	West to East, Sunny
17-03-2017	128	182	6.5	11	318	North to South, Sunny
23-03-2017	95	209	3.5	10	504	South to North, Sunny
24-03-2017	32	117	3.73	6	229	East to West, Sunny
Brief Statistics	**$PM_{2.5}$**	**RPM**	**SO_2**	**NOx**	**SPM**	
Maximum	**180**	**265**	**29**	**31**	**670**	
Minimum	**11.00**	**28.00**	**1.62**	**6.00**	**42.00**	
Average	**75.73**	**163.14**	**10.81**	**14.70**	**315.12**	
95 Percentile	**132.00**	**250.40**	**24.00**	**24.00**	**526.20**	All values in µg/m3
98 Percentile	**164.64**	**258.28**	**28.08**	**27.40**	**548.08**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

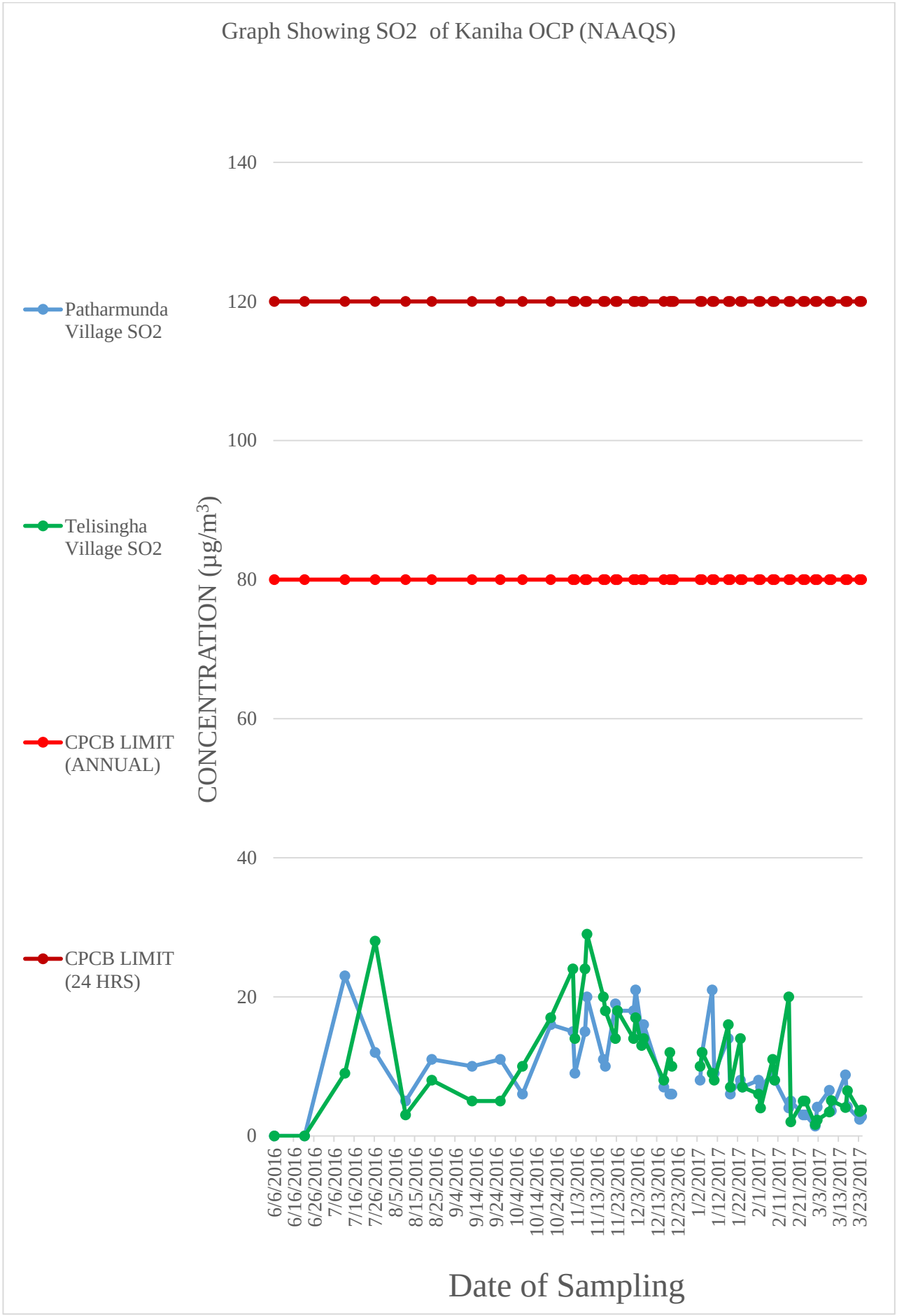

Graph Showing $PM_{2.5}$ of Kaniha OCP
Near Z-patch PM2 5
Project Office PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
180
160
140
120
100
80
60
40
20
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

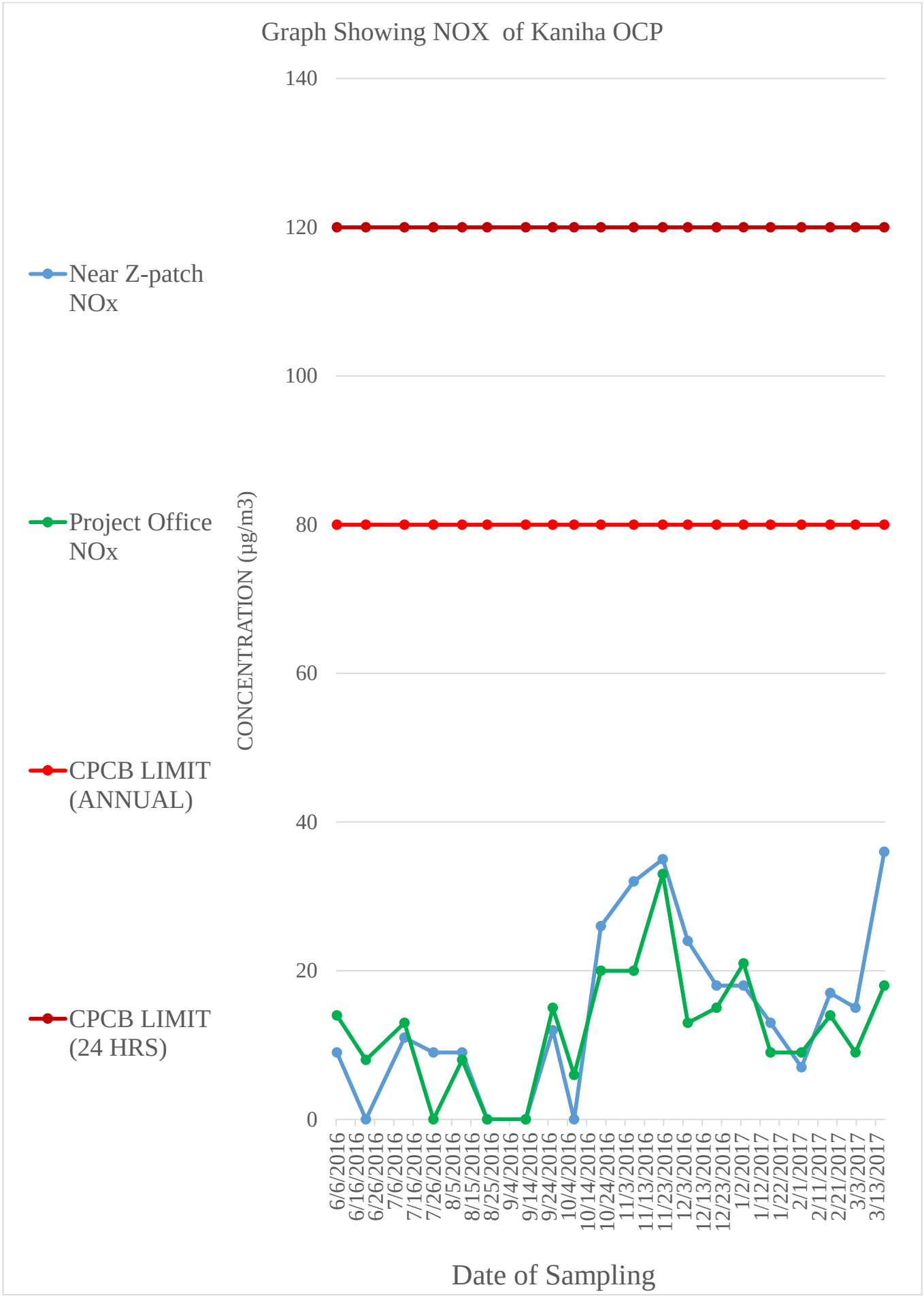

Graph Showing $PM_{2.5}$ of Kaniha OCP (NAAQS)
Patharmunda Village PM2 5
Telisingha Village PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
250
200
150
100
50
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
3/23/2017
Date of Sampling

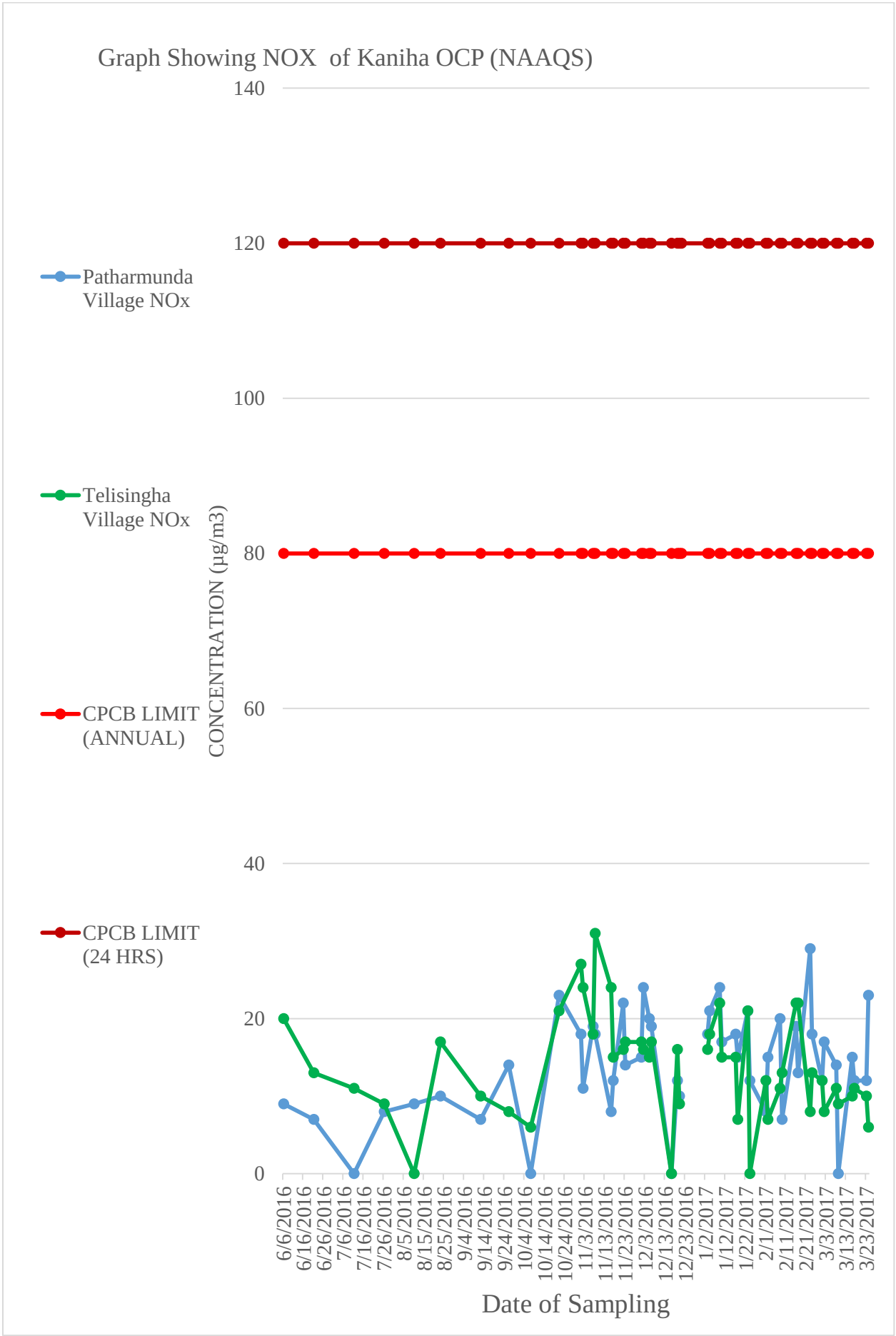

Graph Showing RPM of Kaniha OCP
Near Z-patch RPM
Project Office RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
600
500
400
300
200
100
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

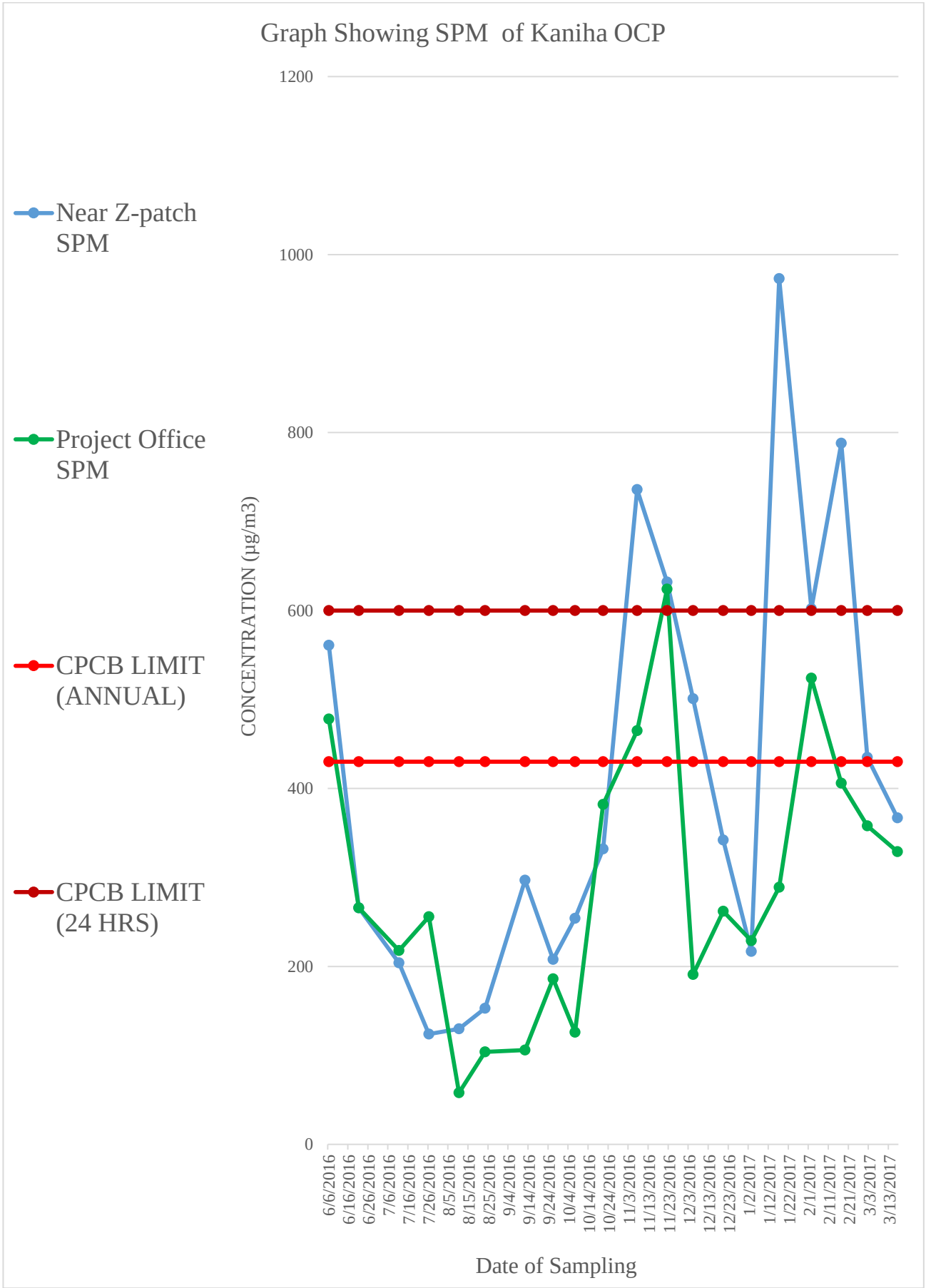

Graph Showing RPM of Kaniha OCP (NAAQS)
Patharmunda Village RPM
Telisingha Village RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
350
300
250
200
150
100
50
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
3/23/2017
Date of Sampling


Graph Showing SOX of Kaniha OCP
Near Z-patch SO2
Project Office SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling


Graph Showing SO2 of Kaniha OCP (NAAQS)
Patharmunda Village SO2
Telisingha Village SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
3/23/2017
Date of Sampling


Graph Showing NOX of Kaniha OCP
140
120
100
80
60
40
20
0
CONCENTRATION (µg/m3)
Near Z-patch NOx
Project Office NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling


Graph Showing NOX of Kaniha OCP (NAAQS)
140
120
100
80
60
40
20
0
CONCENTRATION (µg/m3)
Patharmunda Village NOx
Telisingha Village NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
3/23/2017
Date of Sampling


Graph Showing SPM of Kaniha OCP
Near Z-patch SPM
Project Office SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
1200
1000
800
600
400
200
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

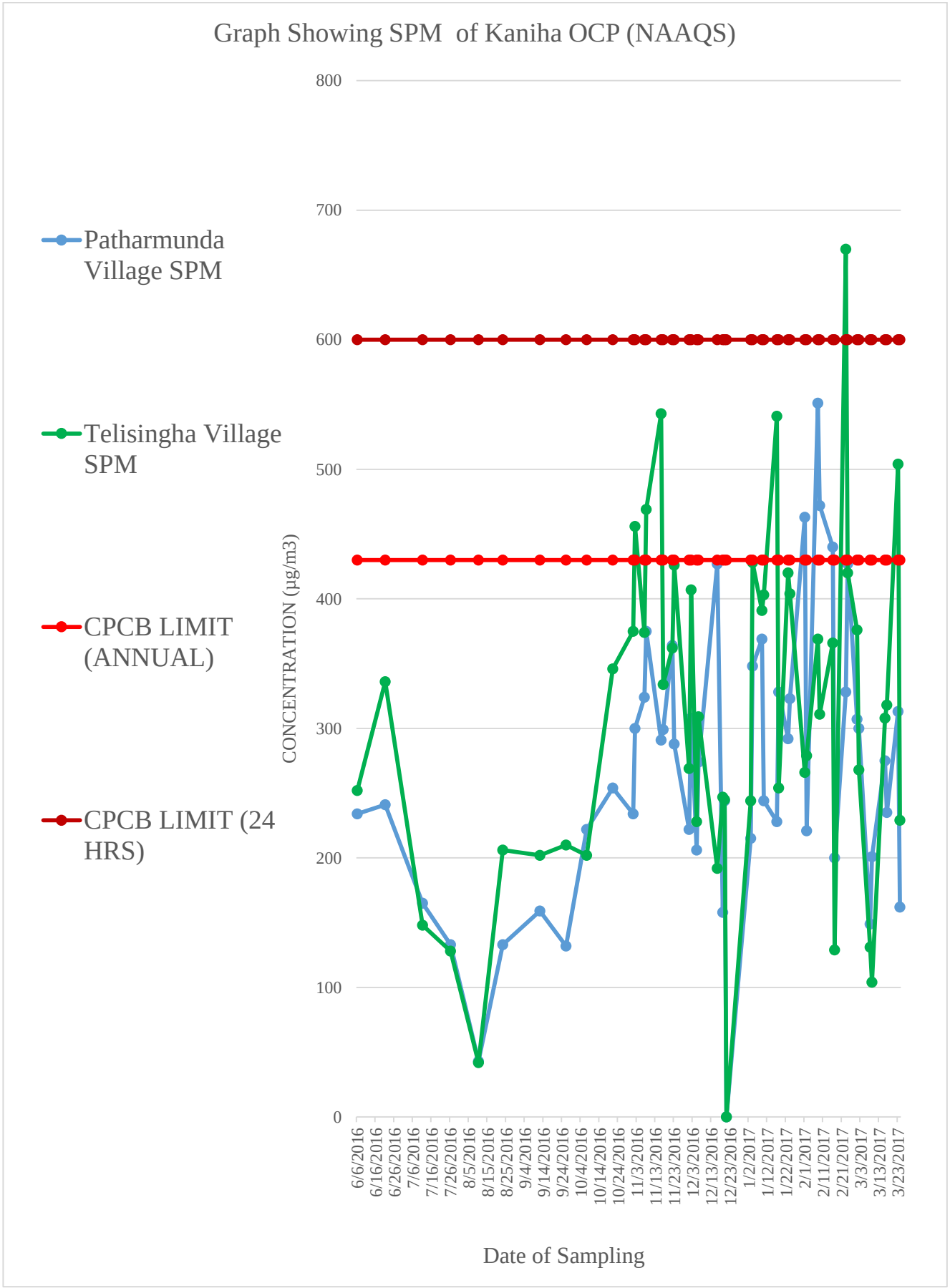

Graph Showing SPM of Kaniha OCP (NAAQS)
Patharmunda Village SPM
Telisingha Village SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
800
700
600
500
400
300
200
100
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
3/23/2017
Date of Sampling

Table : 30
Project: Hingula OCP
Monitoring Station: Bhalugadia Village

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
02-06-2016	86	116	<25	78	210	South to North Sunny,evening heavy rainfall
17-06-2016	56	141	<25	9	288	West to east sunny, night rainfall
04-07-2016	18	78	4	17	168	East to west sunny and rainfall
19-07-2016	33	92	8	11	144	East to west cloudy and rainfall
05-08-2016	14	37	27	11	54	East to west rainfall
18-08-2016	27	72	3	<6	138	South to north Sunny
07-09-2016	24	58	10	8	92	West to East cloudy
20-09-2016	32	168	5	10	266	West to East Rainfall
04-10-2016	28	109	9	9	183	East to west cloudy
18-10-2016	28	132	11	15	218	East to west Sunny
03-11-2016	20	126	13	16	284	North East to South West, Sunny
18-11-2016	34	174	15	<6	262	East to West, Sunny
07-12-2016	55	81	10	<6	255	West to East, Sunny
22-12-2016	74	248	25	28	253	South to West, Sunny
04-01-2017	173	203	7	16	295	West to East, Sunny
18-01-2017	90	234	9	<6	342	East to West, Sunny
06-02-2017	127	128	9	10	266	North to East, Sunny
21-02-2017	149	239	3	16	436	East to West, Sunny
06-03-2017	101	158	3.26	28	425	West to East, Sunny
21-03-2017	77	126	2.72	6	289	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**173**	**248**	**27**	**78**	**436**	
Minimum	**14.00**	**37.00**	**2.72**	**6.00**	**54.00**	
Average	**62.30**	**136.00**	**9.67**	**18.00**	**243.40**	
95 Percentile	**150.20**	**239.45**	**25.30**	**40.50**	**425.55**	
98 Percentile	**163.88**	**244.58**	**26.32**	**63.00**	**431.82**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 31
Project: Hingula OCP
Monitoring Station: Gopalprasad Village

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
02-06-2016	76	175	<25	8	369	South to North Sunny,evening heavy rainfall
17-06-2016	51	112	<25	9	385	West to east sunny, night rainfall
04-07-2016	32	94	4	10	206	West to east sunny and rainfall
19-07-2016	22	88	12	10	124	East to west cloudy and rainfall
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**76**	**175**	**12**	**10**	**385**	
Minimum	**22.00**	**88.00**	**4.00**	**8.00**	**124.00**	
Average	**45.25**	**117.25**	**8.00**	**9.25**	**271.00**	
95 Percentile	**72.25**	**165.55**	**11.60**	**10.00**	**382.60**	
98 Percentile	**74.50**	**171.22**	**11.84**	**10.00**	**384.04**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table :32
Project: Hingula OCP
Monitoring Station: Kumunda Village

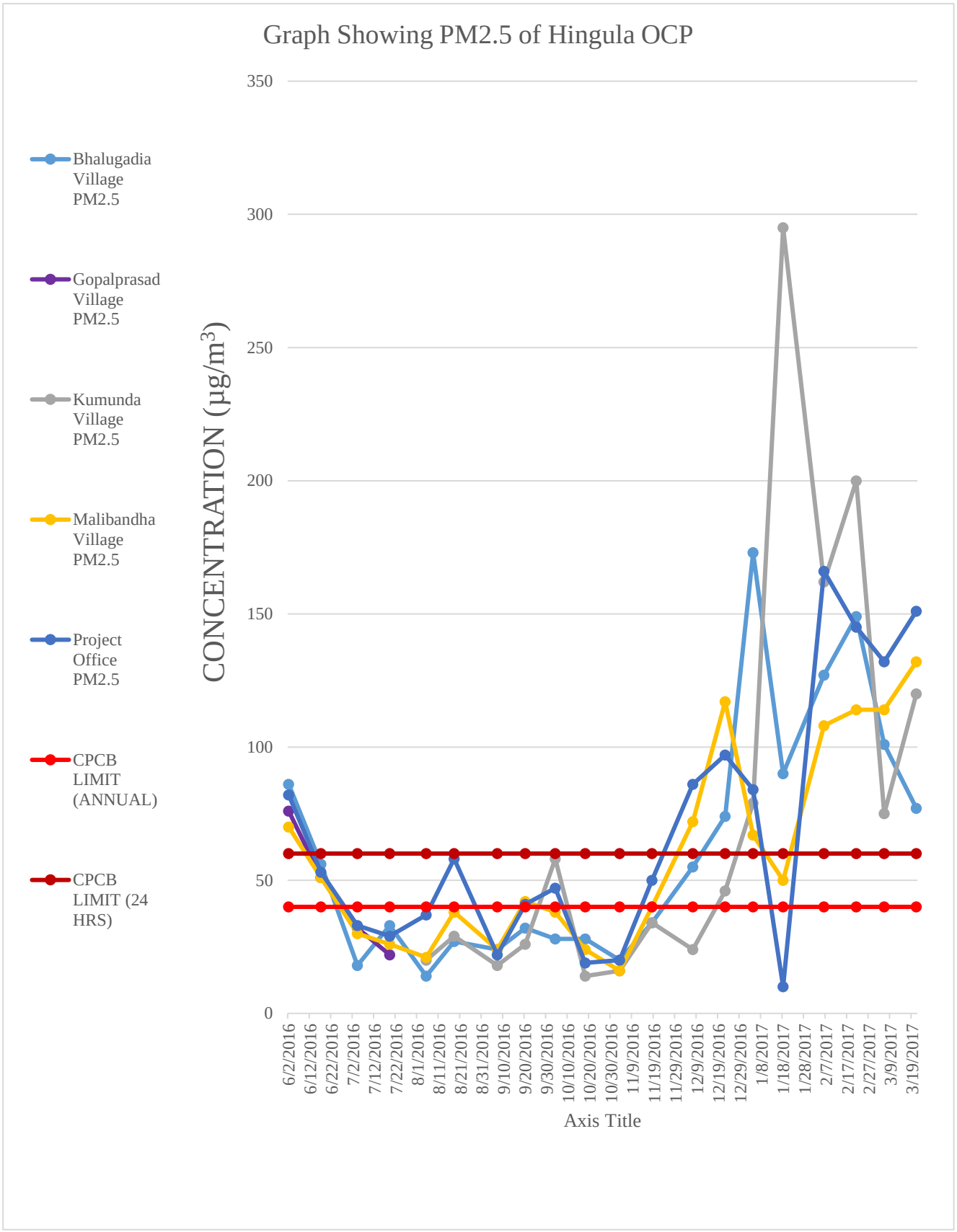
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
05-08-2016	20	38	5	9	68	East to west rainfall
18-08-2016	29	96	7	<6	136	South to north Sunny
07-09-2016	18	68	6	<6	94	West to East cloudy
20-09-2016	26	14	9	13	182	West to East Rainfall
04-10-2016	58	146	7	18	194	East to west cloudy
18-10-2016	14	78	5	<6	116	East to west Sunny
03-11-2016	16	137	12	7	205	North East to South West, Sunny
18-11-2016	34	148	13	27	266	East to West, Sunny
07-12-2016	24	193	15	<6	231	West to East, Sunny
22-12-2016	46	104	24	22	153	South to West, Sunny
04-01-2017	79	66	7	14	246	West to East, Sunny
18-01-2017	295	179	11	13	315	East to West, Sunny
06-02-2017	162	99	10	<6	234	North to South, Sunny
21-02-2017	200	130	3	22	276	East to West, Sunny
06-03-2017	75	83	3.59	12	339	West to East, Sunny
21-03-2017	120	180	2.67	7	229	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**295**	**193**	**24**	**27**	**339**	
Minimum	**14.00**	**14.00**	**2.67**	**7.00**	**68.00**	
Average	**76.00**	**109.94**	**8.77**	**14.91**	**205.25**	
95 Percentile	**223.75**	**183.25**	**17.25**	**24.50**	**321.00**	
98 Percentile	**266.50**	**189.10**	**21.30**	**26.00**	**331.80**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

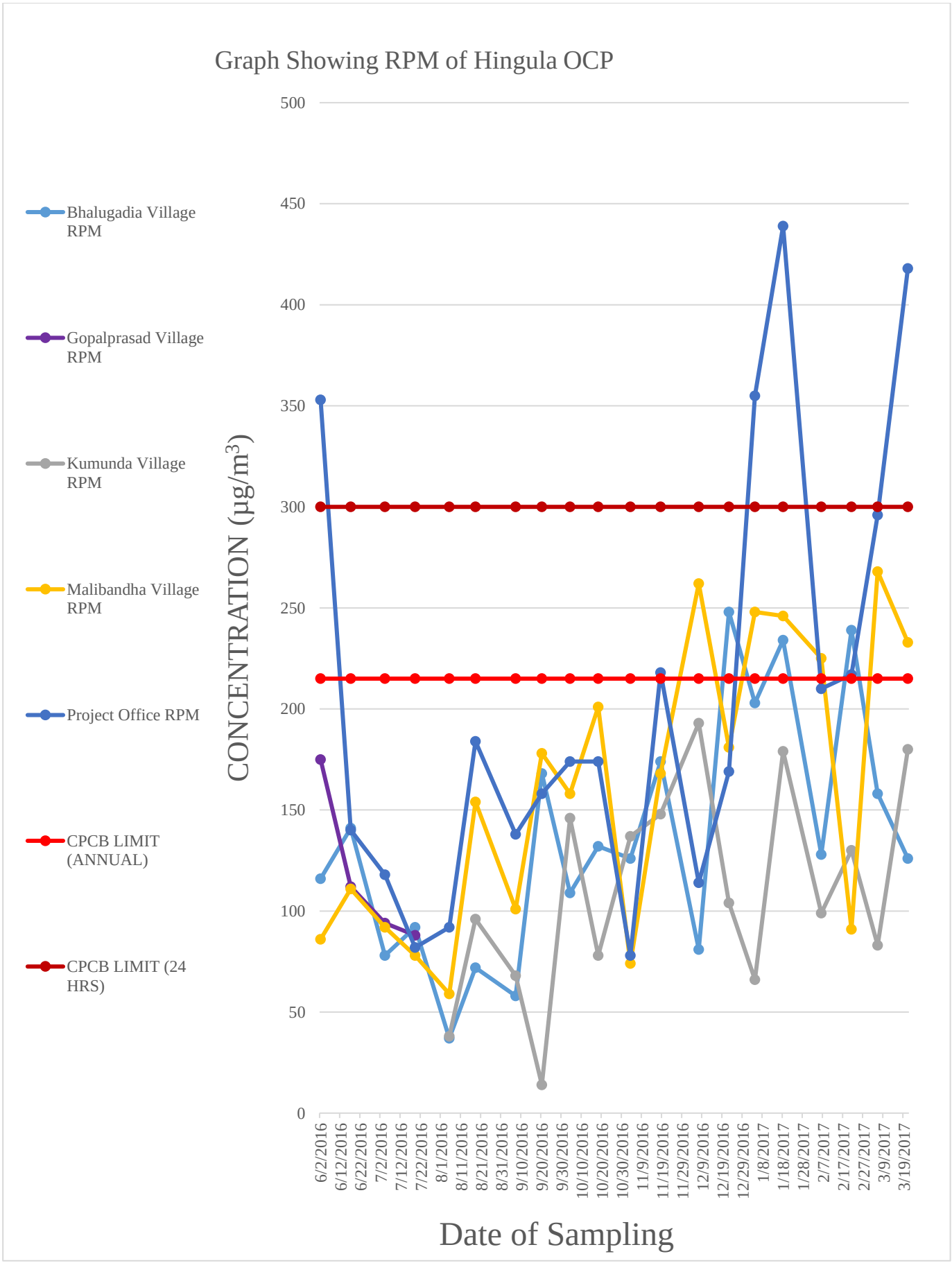
Table : 33
Project: Hingula OCP
Monitoring Station: Malibandha Village

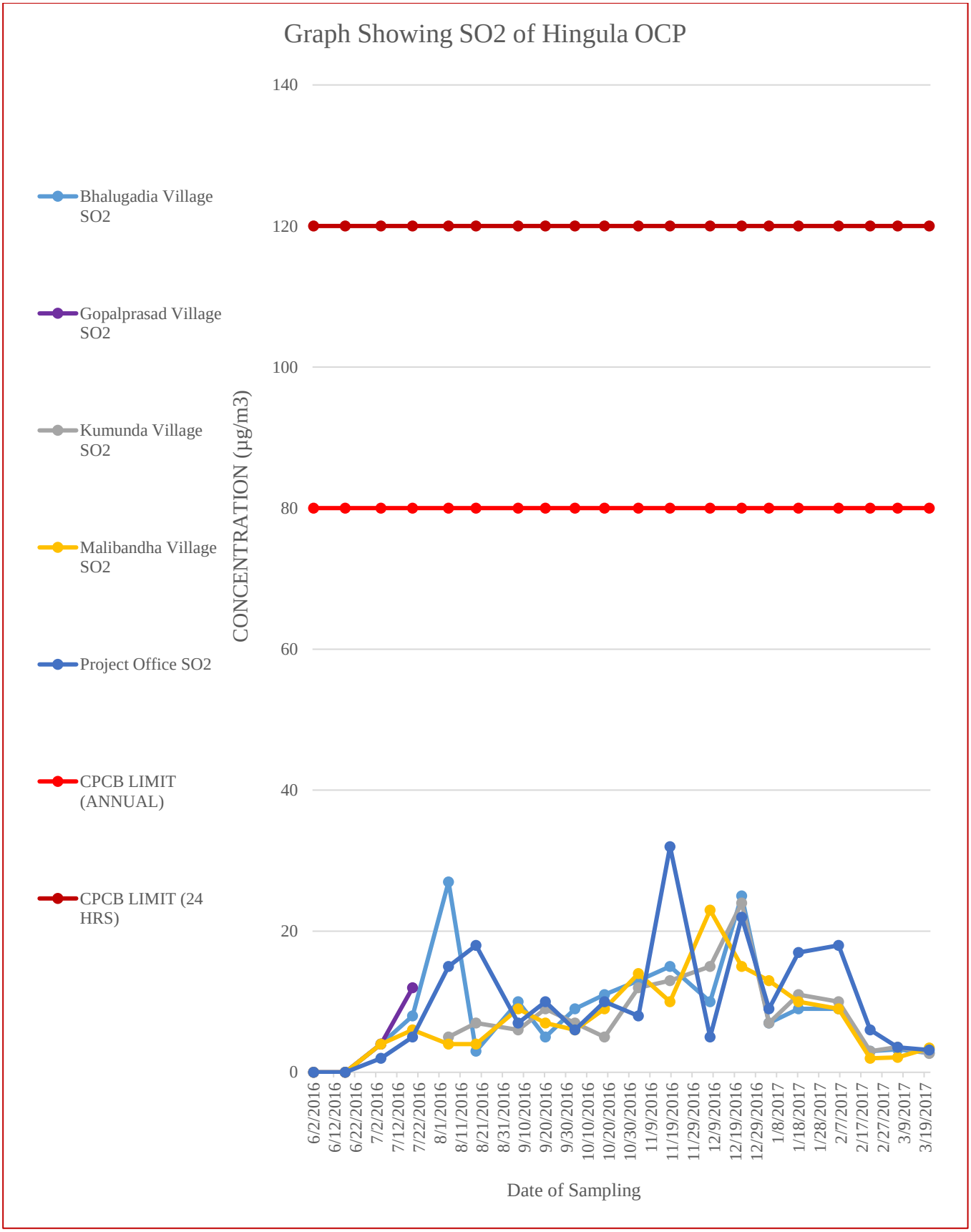
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
02-06-2016	70	86	<25	9	138	South to North Sunny,evening heavy rainfall
17-06-2016	51	111	<25	14	199	West to east sunny, night rainfall
04-07-2016	30	92	4	<6	200	West to east sunny and rainfall
19-07-2016	26	78	6	7	134	East to west cloudy and rainfall
05-08-2016	21	59	4	27	78	East to west rainfall
18-08-2016	38	154	4	6	236	South to north Sunny
07-09-2016	24	101	9	<6	169	West to East cloudy
20-09-2016	42	178	7	<6	309	West to East Rainfall
04-10-2016	38	158	6	10	241	East to west cloudy
18-10-2016	24	201	9	15	309	East to west Sunny
03-11-2016	16	74	14	<6	112	North East to South West, Sunny
18-11-2016	40	168	10	19	352	East to West, Sunny
07-12-2016	72	262	23	28	454	West to East, Sunny
22-12-2016	117	181	15	<6	393	South to West, Sunny
04-01-2017	67	248	13	9	358	West to East, Sunny
18-01-2017	50	246	10	10	417	East to West, Sunny
06-02-2017	108	225	9	6	430	North to East, Sunny
21-02-2017	114	91	2	22	134	East to West, Sunny
06-03-2017	114	268	2.12	22	478	West to East, Sunny
21-03-2017	132	233	3.46	11	489	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**132**	**268**	**23**	**28**	**489**	
Minimum	**16.00**	**59.00**	**2.00**	**6.00**	**78.00**	
Average	**59.70**	**160.70**	**8.37**	**14.33**	**281.50**	
95 Percentile	**117.75**	**262.30**	**16.20**	**27.30**	**478.55**	
98 Percentile	**126.30**	**265.72**	**20.28**	**27.72**	**484.82**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

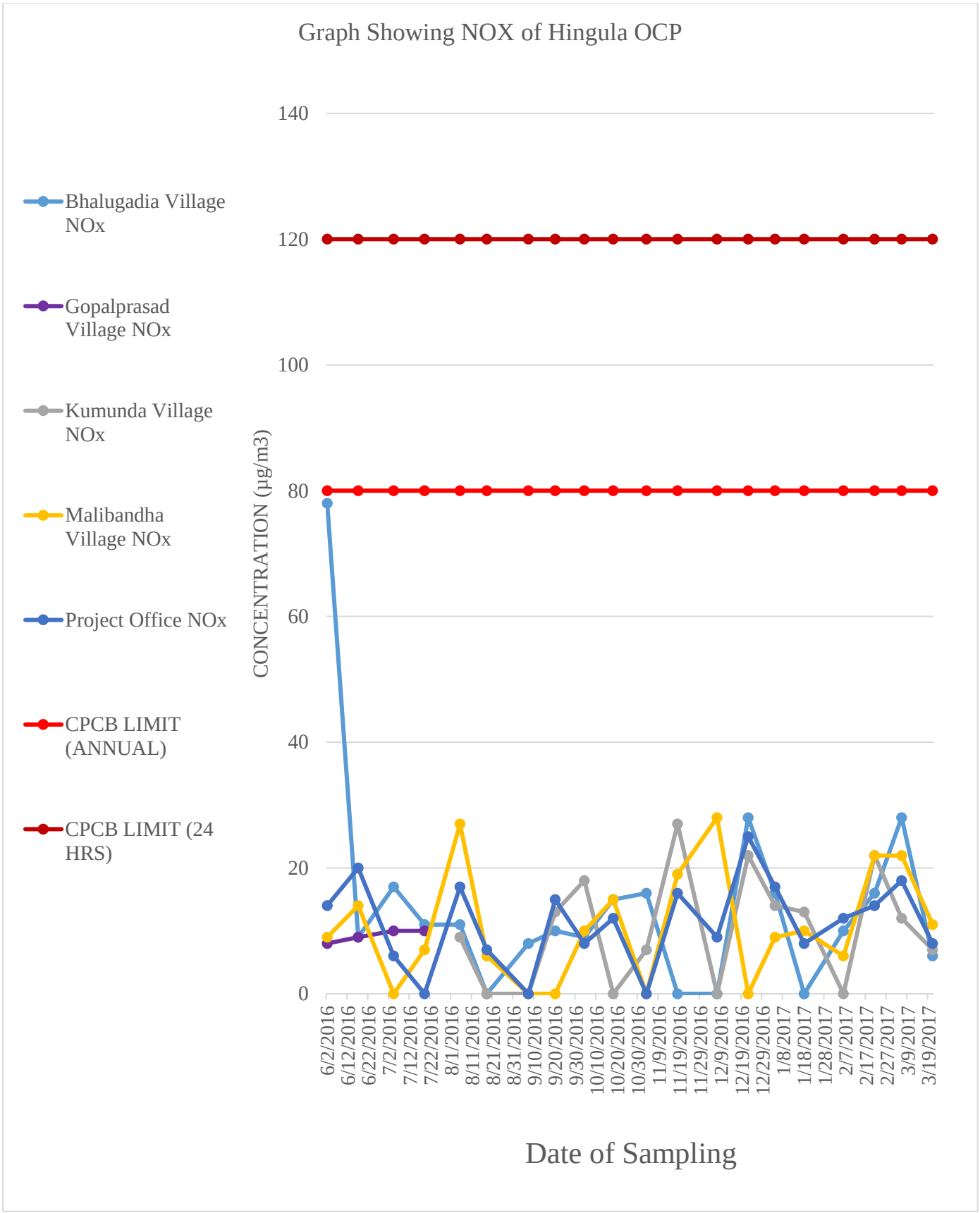
Table :34
Project: Hingula OCP
Monitoring Station: Project Office

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
02-06-2016	82	353	<25	14	475	South to North Sunny,evening heavy rainfall
17-06-2016	53	140	<25	20	224	West to east sunny, night rainfall
04-07-2016	33	118	2	6	222	West to east sunny and rainfall
19-07-2016	29	82	5	<6	112	East to west cloudy and rainfall
05-08-2016	37	92	15	17	103	East to west rainfall
18-08-2016	58	184	18	7	282	South to north Sunny
07-09-2016	22	138	7	<6	216	West to East cloudy
20-09-2016	41	158	10	15	334	West to East Rainfall
04-10-2016	47	174	6	8	300	East to west cloudy
18-10-2016	19	174	10	12	315	East to west Sunny
03-11-2016	20	78	8	<6	143	North East to South West, Sunny
18-11-2016	50	218	32	16	507	East to West, Sunny
07-12-2016	86	114	5	9	456	West to East, Sunny
22-12-2016	97	169	22	25	397	South to West, Sunny
04-01-2017	84	355	9	17	382	West to East, Sunny
18-01-2017	10	439	17	8	637	East to West, Sunny
06-02-2017	166	210	18	12	573	North to East, Sunny
21-02-2017	145	217	6	14	520	East to West, Sunny
06-03-2017	132	296	3.53	18	561	West to East, Sunny
21-03-2017	151	418	3.16	8	818	East to West, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**166**	**439**	**32**	**25**	**818**	
Minimum	**10.00**	**78.00**	**2.00**	**6.00**	**103.00**	
Average	**68.10**	**206.35**	**10.93**	**13.29**	**378.85**	
95 Percentile	**151.75**	**419.05**	**23.50**	**21.00**	**646.05**	
98 Percentile	**160.30**	**431.02**	**28.60**	**23.40**	**749.22**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing PM2.5 of Hingula OCP
Bhalugadia Village PM2.5
Gopalprasad Village PM2.5
Kumunda Village PM2.5
Malibandha Village PM2.5
Project Office PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
350
300
250
200
150
100
50
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Axis Title


Graph Showing RPM of Hingula OCP
Bhalugadia Village RPM
Gopalprasad Village RPM
Kumunda Village RPM
Malibandha Village RPM
Project Office RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
500
450
400
350
300
250
200
150
100
50
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling


Graph Showing SO2 of Hingula OCP
Bhalugadia Village SO2
Gopalprasad Village SO2
Kumunda Village SO2
Malibandha Village SO2
Project Office SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling


Graph Showing NOX of Hingula OCP
Bhalugadia Village NOx
Gopalprasad Village NOx
Kumunda Village NOx
Malibandha Village NOx
Project Office NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling

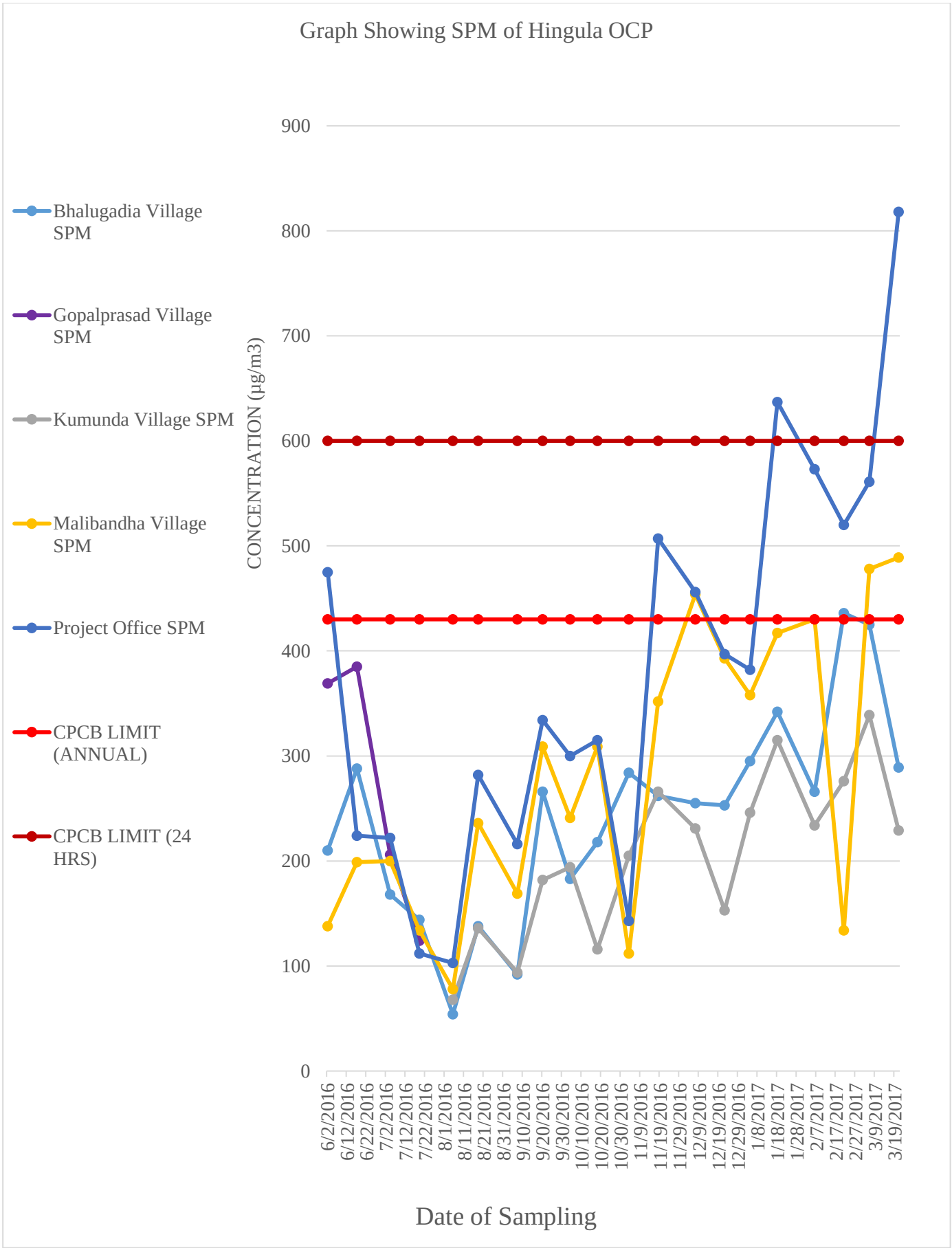

Graph Showing SPM of Hingula OCP
Bhalugadia Village SPM
Gopalprasad Village SPM
Kumunda Village SPM
Malibandha Village SPM
Project Office SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
900
800
700
600
500
400
300
200
100
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling

Table : 35
Project: Balaram OCP
Monitoring Station: Natada Village

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
03-06-2016	70	111	<25	7	219	East to West Suuny
20-06-2016	72	187	<25	9	255	West to East Sunny
05-07-2016	42	126	3	13	264	East to west sunny and rainfall
20-07-2016	36	94	13	17	143	East to west sunny
08-08-2016	34	65	8	9	93	South to north rainfall
19-08-2016	44	102	3	6	136	West to east Sunny
08-09-2016	36	84	9	<6	122	East to west sunny & cloudy
21-09-2016	34	162	5	8	238	East to west cloudy
05-10-2016	17	112	4	7	174	East to west cloudy
19-10-2016	34	108	8	10	242	West to East Sunny
04-11-2016	14	58	8	<6	128	North East to South West, Sunny
21-11-2016	48	238	19	7	394	East to West, Sunny & Cloudy
08-12-2016	88	203	20	23	394	East to West, Sunny
23-12-2016	103	174	16	20	230	South to West, Sunny
05-01-2017	216	211	8	8	238	East to West, Sunny
19-01-2017	69	311	10	15	621	North to Suoth, Sunny
07-02-2017	141	184	4	11	329	East to West, Sunny
22-02-2017	110	208	2	10	347	North to South, Sunny
07-03-2017	63	77	5.45	23	166	South to North, Cloudy
22-03-2017	55	177	2.53	10	641	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**216**	**311**	**20**	**23**	**641**	
Minimum	**14.00**	**58.00**	**2.00**	**6.00**	**93.00**	
Average	**66.30**	**149.60**	**8.22**	**11.83**	**268.70**	
95 Percentile	**144.75**	**241.65**	**19.15**	**23.00**	**622.00**	
98 Percentile	**187.50**	**283.26**	**19.66**	**23.00**	**633.40**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 35
Project: Balaram OCP
Monitoring Station: Solada Village

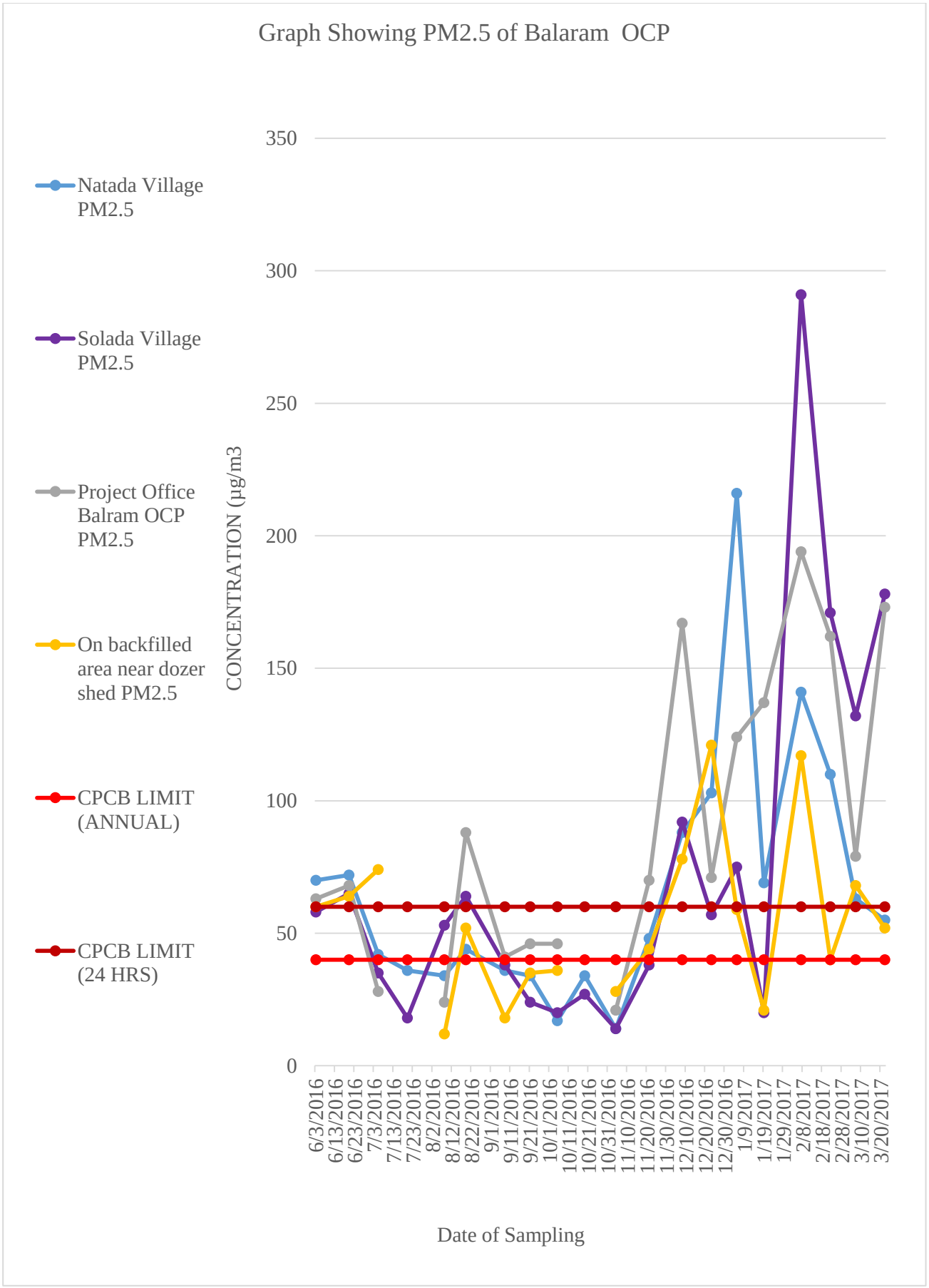
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
03-06-2016	58	68	<25	11	159	East to West Suuny
20-06-2016	65	181	<25	8	218	West to East Sunny
05-07-2016	35	96	8	6	218	East to west sunny and rainfall
20-07-2016	18	76	14	18	111	East to west sunny
08-08-2016	53	94	13	29	150	South to north rainfall
19-08-2016	64	158	15	12	216	West to east Sunny
08-09-2016	38	103	24	22	161	East to west sunny & cloudy
21-09-2016	24	86	10	14	144	East to west cloudy
05-10-2016	20	138	6	8	216	East to west cloudy
19-10-2016	27	197	9	15	288	West to East Sunny
04-11-2016	14	76	5	<6	132	North East to South West, Sunny
21-11-2016	38	174	11	8	278	East to West, Sunny & Cloudy
08-12-2016	92	143	18	15	217	East to West, Sunny
23-12-2016	57	165	9	15	363	South to West, Sunny
05-01-2017	75	24	12	15	78	East to West, Sunny
19-01-2017	20	68	7	9	152	North to Suoth, Sunny
07-02-2017	291	268	5	10	343	East to West, Sunny
22-02-2017	171	205	20	13	425	North to South, Sunny
07-03-2017	132	166	11.6	30	288	South to North, Cloudy
22-03-2017	178	208	5.33	8	508	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**291**	**268**	**24**	**30**	**508**	
Minimum	**14.00**	**24.00**	**5.00**	**6.00**	**78.00**	
Average	**73.50**	**134.70**	**11.27**	**14.00**	**233.25**	
95 Percentile	**183.65**	**211.00**	**20.60**	**29.10**	**429.15**	
98 Percentile	**248.06**	**245.20**	**22.64**	**29.64**	**476.46**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

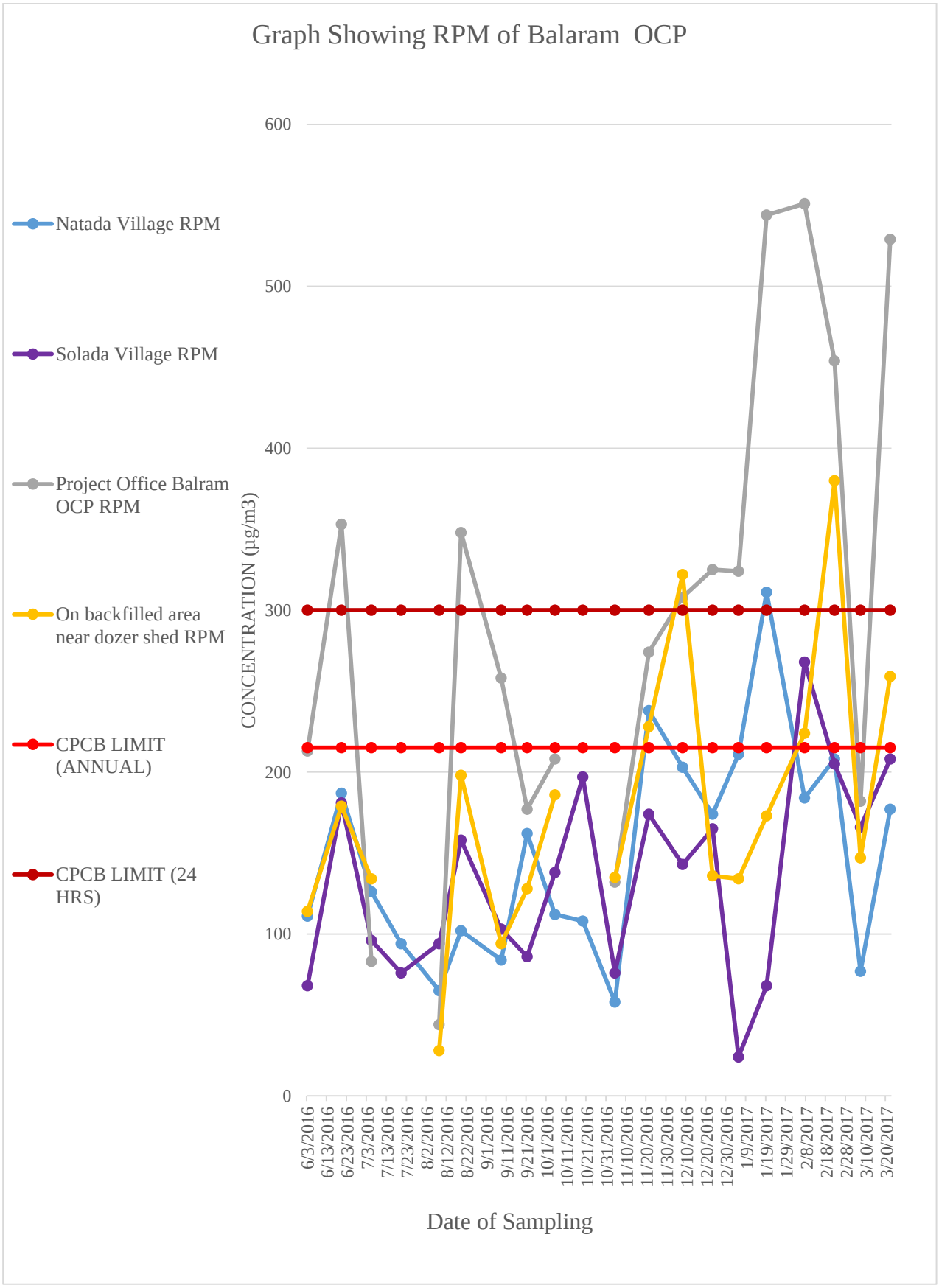
Table : 36
Project: Balaram OCP
Monitoring Station: Project Office Balram OCP

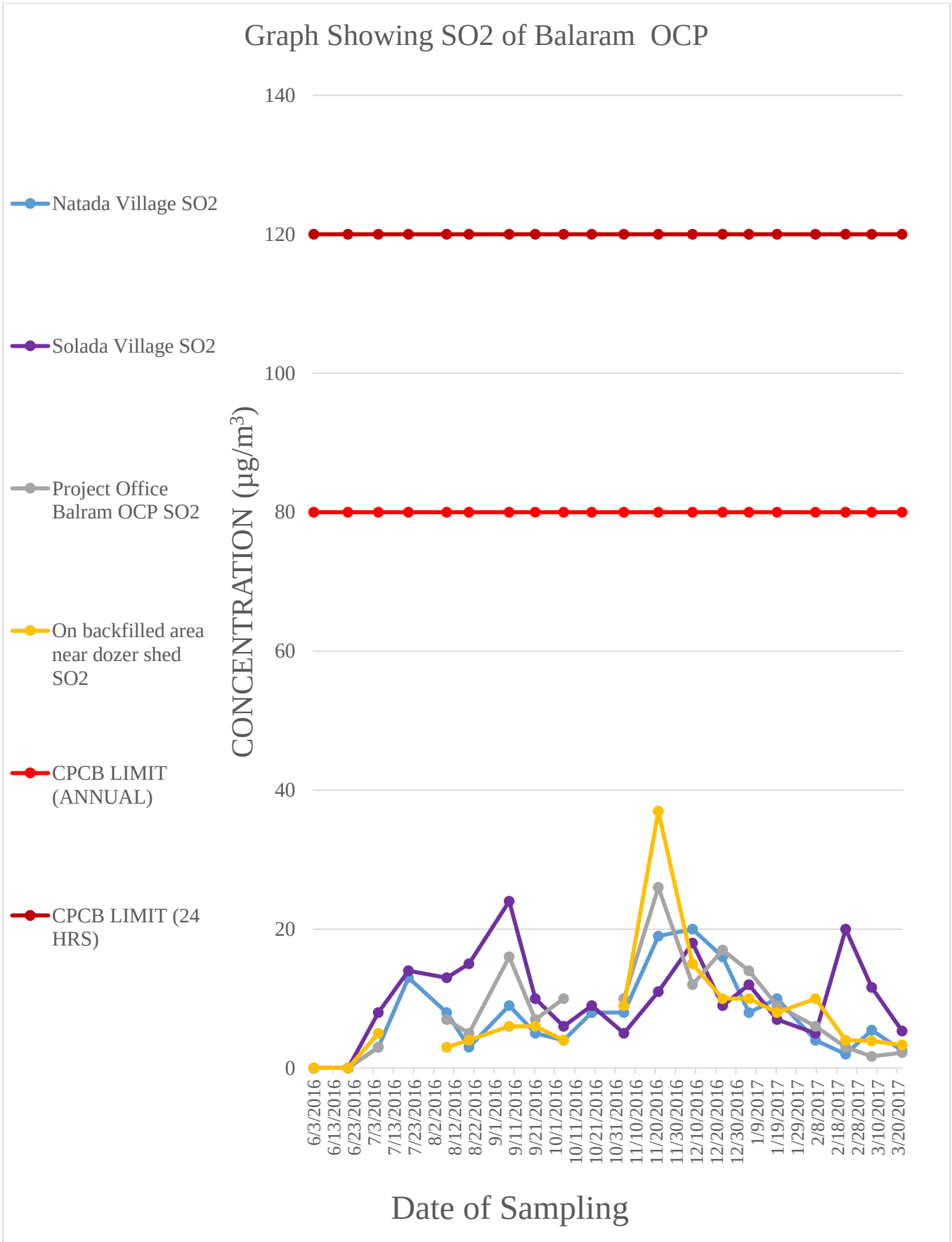
Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
03-06-2016	63	213	<25	27	475	East to West Suuny
20-06-2016	68	353	<25	57	537	West to East Sunny
05-07-2016	28	83	3	<6	179	East to west sunny and rainfall
20-07-2016						Mines strike
08-08-2016	24	44	7	17	75	South to north rainfall
19-08-2016	88	348	5	9	724	West to east Sunny
08-09-2016	41	258	16	<6	552	East to west sunny & cloudy
21-09-2016	46	177	7	<6	273	East to west cloudy
05-10-2016	46	208	10	6	314	East to west cloudy
19-10-2016						mine strike
04-11-2016	21	132	10	12	351	North East to South West, Sunny
21-11-2016	70	274	26	24	508	East to West, Sunny & Cloudy
08-12-2016	167	308	12	<6	513	East to West, Sunny
23-12-2016	71	325	17	14	523	South to West, Sunny
05-01-2017	124	324	14	12	443	East to West, Sunny
19-01-2017	137	544	9	7	910	North to Suoth, Sunny
07-02-2017	194	551	6	28	1041	East to West, Sunny
22-02-2017	162	454	3	24	1014	North to South, Sunny
07-03-2017	79	182	1.69	10	424	South to North, Cloudy
22-03-2017	173	529	2.23	10	867	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**194**	**551**	**26**	**57**	**1041**	
Minimum	**21.00**	**44.00**	**1.69**	**6.00**	**75.00**	
Average	**89.00**	**294.83**	**9.31**	**18.36**	**540.17**	
95 Percentile	**176.15**	**545.05**	**19.25**	**38.15**	**1018.05**	
98 Percentile	**186.86**	**548.62**	**23.30**	**49.46**	**1031.82**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

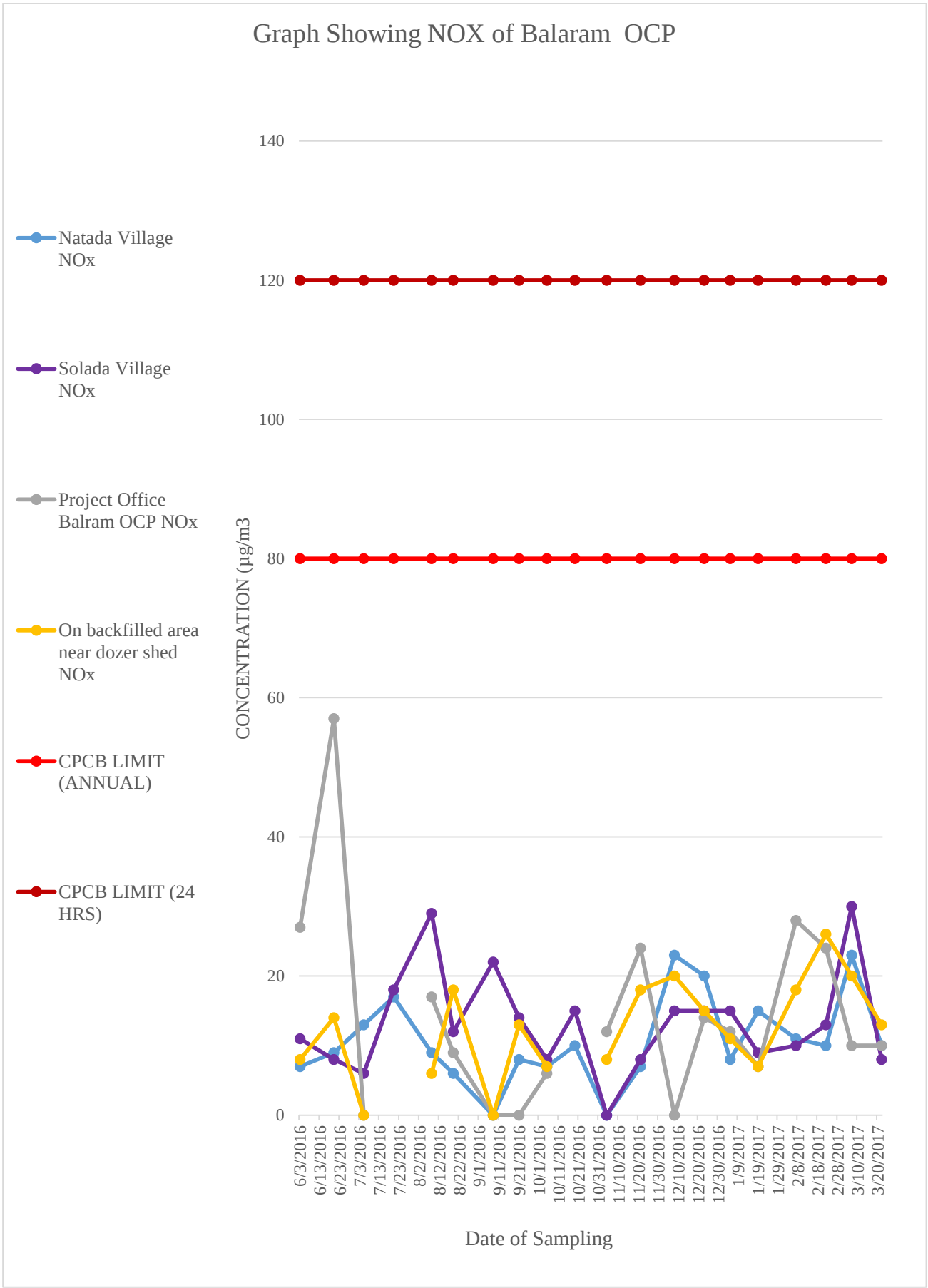
Table : 37
Project: Balaram OCP
Monitoring Station: On backfilled area near dozer shed

Date of Sampling	PM2 5	RPM	SO2	NOx	SPM	Remarks
03-06-2016	60	114	<25	8	302	East to West Suuny
20-06-2016	64	179	<25	14	341	West to East Sunny
05-07-2016	74	134	5	<6	292	East to west sunny and rainfall
20-07-2016						Mines strike
08-08-2016	12	28	3	6	79	South to north rainfall
19-08-2016	52	198	4	18	326	West to east Sunny
08-09-2016	18	94	6	<6	142	East to west sunny & cloudy
21-09-2016	35	128	6	13	212	East to west cloudy
05-10-2016	36	186	4	7	284	East to west cloudy
19-10-2016						mine strike
04-11-2016	28	135	9	8	247	North East to South West, Sunny
21-11-2016	44	228	37	18	352	East to West, Sunny & Cloudy
08-12-2016	78	322	15	20	595	East to West, Sunny
23-12-2016	121	136	10	15	231	South to West, Sunny
05-01-2017	59	134	10	11	288	East to West, Sunny
19-01-2017	21	173	8	7	423	North to Suoth, Sunny
07-02-2017	117	224	10	18	716	East to West, Sunny
22-02-2017	40	380	4	26	634	North to South, Sunny
07-03-2017	68	147	3.91	20	243	South to North, Cloudy
22-03-2017	52	259	3.33	13	500	West to East, Sunny
Brief Statistics	**PM2.5**	**RPM**	**SO2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**121**	**380**	**37**	**26**	**716**	
Minimum	**12.00**	**28.00**	**3.00**	**6.00**	**79.00**	
Average	**54.39**	**177.72**	**8.64**	**13.88**	**344.83**	
95 Percentile	**117.60**	**330.70**	**20.50**	**21.50**	**646.30**	
98 Percentile	**119.64**	**360.28**	**30.40**	**24.20**	**688.12**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing PM2.5 of Balaram OCP
Natada Village PM2.5
Solada Village PM2.5
Project Office Balram OCP PM2.5
On backfilled area near dozer shed PM2.5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3
350
300
250
200
150
100
50
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling


Graph Showing RPM of Balaram OCP
Natada Village RPM
Solada Village RPM
Project Office Balram OCP RPM
On backfilled area near dozer shed RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
600
500
400
300
200
100
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling


Graph Showing SO2 of Balaram OCP
Natada Village SO2
Solada Village SO2
Project Office Balram OCP SO2
On backfilled area near dozer shed SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
140
120
100
80
60
40
20
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling


Graph Showing NOX of Balaram OCP
Natada Village NOx
Solada Village NOx
Project Office Balram OCP NOx
On backfilled area near dozer shed NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3
140
120
100
80
60
40
20
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

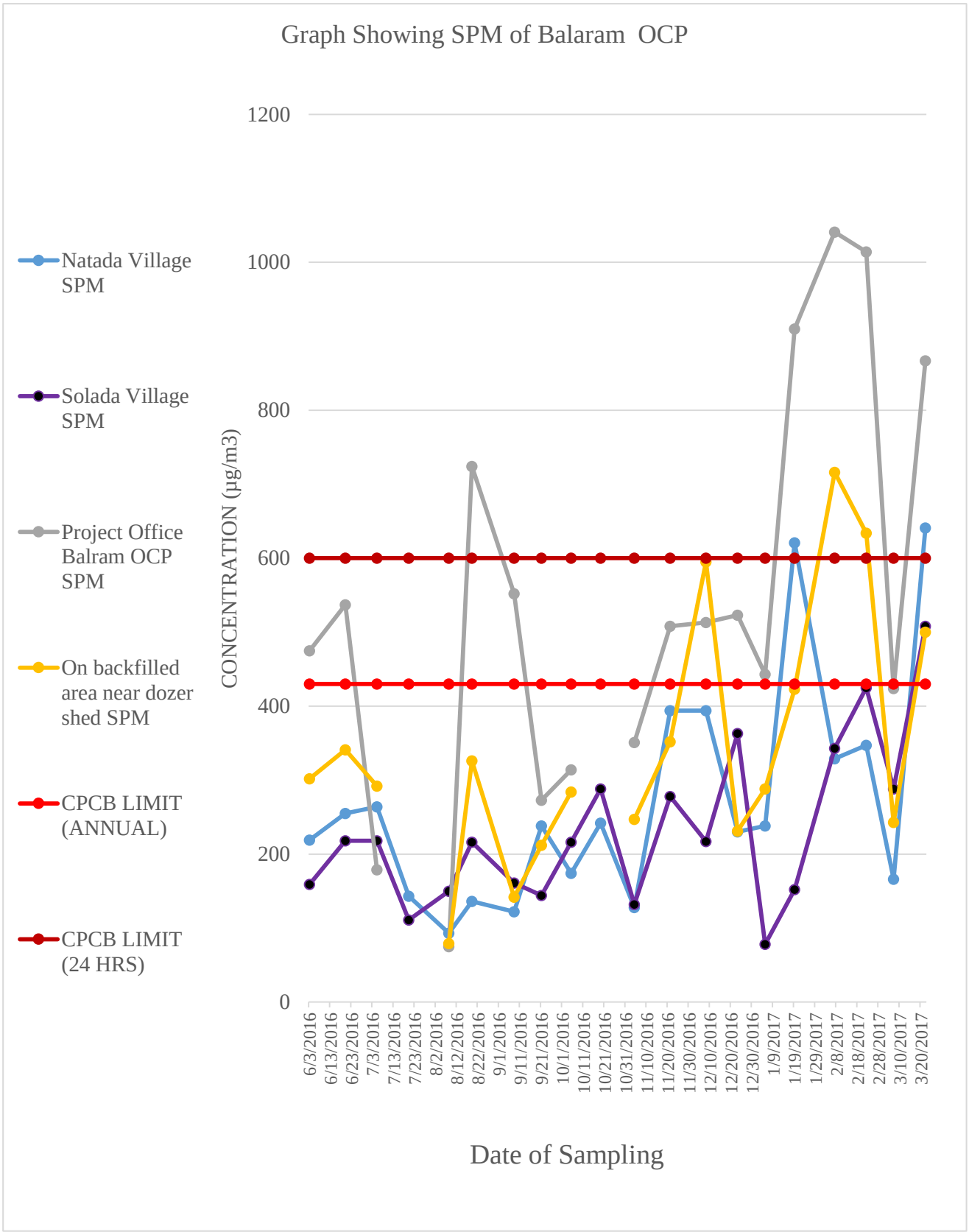

Graph Showing SPM of Balaram OCP
Natada Village SPM
Solada Village SPM
Project Office Balram OCP SPM
On backfilled area near dozer shed SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
1200
1000
800
600
400
200
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table : 38
U/G: Talcher Colliery
Monitoring Station: G.M Office

Date of Sampling	PM_{25}	RPM	SO_2	NOx	SPM	Remarks
14-06-2016	44	182	<25	8	289	West to East Sunny
29-06-2016	45	105	<25	7	189	West to East Sunny
14-07-2016	68	118	18	10	224	East to West sunny and rainfall
29-07-2016	22	154	8	<6	244	East to West cloudy and rainfall
11-08-2016	16	41	8	23	62	East to west rainfall
24-08-2016	56	196	9	10	314	West to east Sunny & Evening Rainfall
13-09-2016	32	92	10	<6	154	West to East cloudy
23-09-2016	26	86	5	7	164	East to west cloudy
12-10-2016	62	235	4	6	359	West to East Sunny
28-10-2016	62	228	14	19	402	East to west Sunny
14-11-2016	48	256	15	18	420	North East to South West, Sunny
29-11-2016	80					West to East, Sunny & Cloudy
14-12-2016	112	228	16	20	479	West to East, Sunny
30-12-2016	91	211	24	28	376	South to West, Sunny
13-01-2017	69	249	8	14	278	East to West, Sunny
16-01-2017	137	218	34	8	417	East to West, Sunny
15-02-2017	164	283	30	23	570	South to North Sunny
28-02-2017	144	337	3	17	695	South to North Sunny
15-03-2017	66	215	12.2	<6	392	West to East, Sunny
30-03-2017	42	247	9.94	<6	476	East to West, Sunny
Brief Statistics	**PM_{25}**	**RPM**	**SO_2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**164**	**337**	**34**	**28**	**695**	
Minimum	**16.00**	**41.00**	**3.00**	**6.00**	**62.00**	
Average	**69.30**	**193.74**	**13.42**	**14.53**	**342.32**	
95 Percentile	**145.00**	**288.40**	**30.80**	**24.50**	**582.50**	
98 Percentile	**156.40**	**317.56**	**32.72**	**26.60**	**650.00**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 39
U/G: Talcher Colliery
Monitoring Station: Stores, Talcher Colliery

Date of Sampling	PM_{25}	RPM	SO_2	NOx	SPM	Remarks
14-06-2016	71	169	<25	<6	305	West to East Sunny
29-06-2016	38	114	<25	8	219	West to East Sunny
14-07-2016	48	110	7	<6	236	East to West sunny and rainfall
29-07-2016	30	73	26	<6	173	East to West cloudy and rainfall
11-08-2016	20	41	6	8	60	East to west rainfall
24-08-2016	52	216	9	6	314	West to east Sunny & Evening Rainfall
13-09-2016	34	128	10	<6	220	West to East cloudy
23-09-2016	23	98	4	<6	146	East to west cloudy
12-10-2016	70	267	5	<6	415	West to East Sunny
28-10-2016	78	258	26	32	582	East to west Sunny
14-11-2016	64	318	27	31	682	North East to South West, Sunny
29-11-2016	88	308	24	28	614	West to East, Sunny & Coudy
14-12-2016	147	298	13	17	435	West to East, Sunny
30-12-2016	77	245	21	24	495	South to West, Sunny
13-01-2017	108	347	7	8	590	East to West, Sunny
30-01-2017	160	380	19	16	660	East to West, Sunny
15-02-2017	178	375	31	18	754	South to North Sunny
28-02-2017	88	442	9	26	799	South to North Sunny
15-03-2017	125	293	4.56	24	756	West to East, Sunny
30-03-2017	39	257	3.78	7	516	East to West, Sunny
Brief Statistics	**PM_{25}**	**RPM**	**SO_2**	**NOx**	**SPM**	All values in µg/m3
Maximum	178	442	31	32	799	
Minimum	20.00	41.00	3.78	6.00	60.00	
Average	76.90	236.85	14.02	18.07	448.55	
95 Percentile	160.90	383.10	27.60	31.35	758.15	
98 Percentile	171.16	418.44	29.64	31.74	782.66	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

Table : 40
U/G: Nandira Colliery
Monitoring Station: Project Office, Nandira Colliery

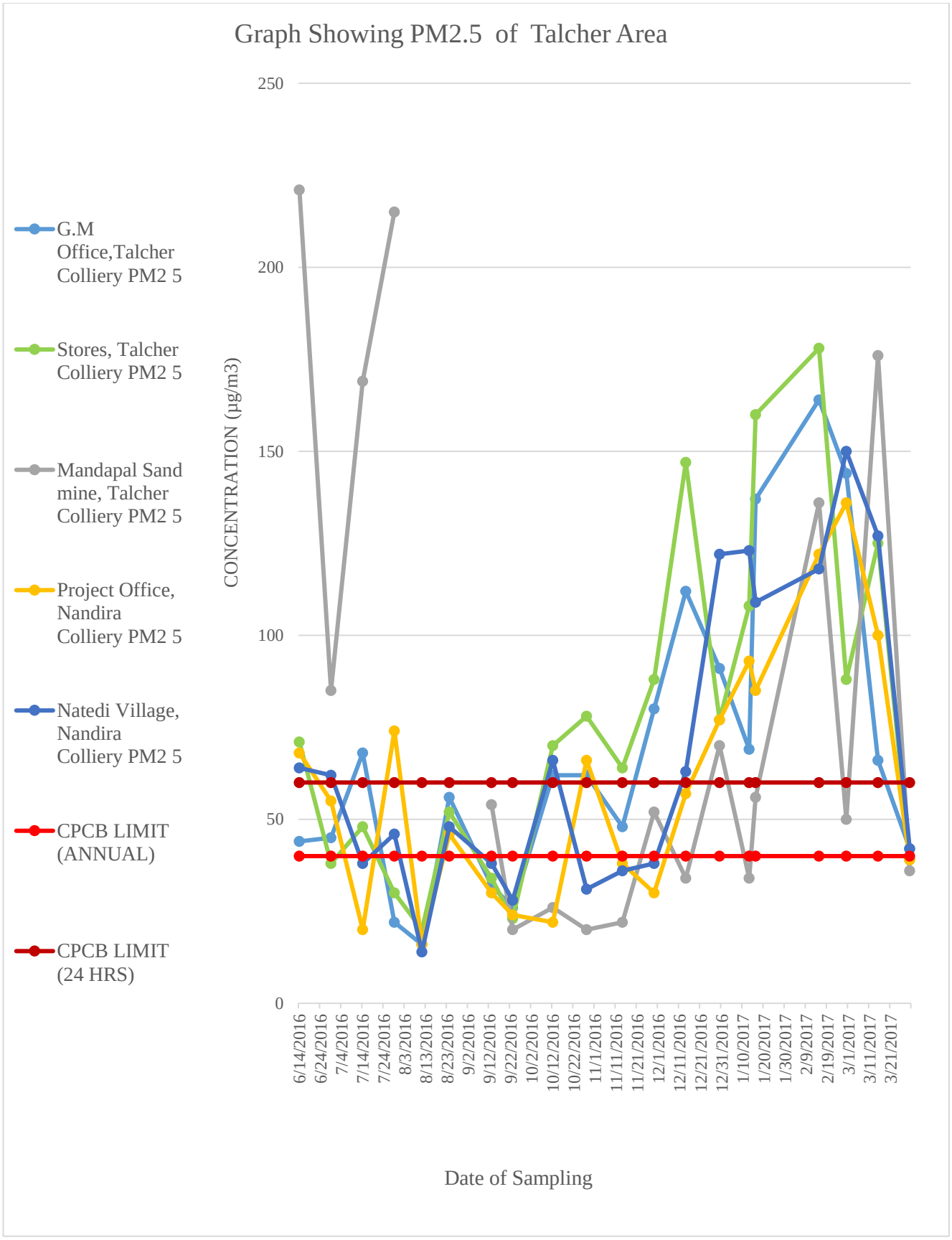
Date of Sampling	PM_{25}	RPM	SO_2	NOx	SPM	Remarks
14-06-2016	68	134	<25	<6	263	West to East Sunny
29-06-2016	55	178	<25	27	316	West to East Sunny
14-07-2016	20	86	8	7	175	East to West sunny and rainfall
29-07-2016	74	168	8	6	276	South to north cloudy and rainfall
12-08-2016	16	42	3	<6	54	West to east rainfall
25-08-2016	46	122	16	23	226	South to north Sunny & Evening Rainfall
14-09-2016	30	68	10	11	112	East to west cloudy & evening rainfall
27-09-2016	24	84	11	13	124	West to East cloudy & evening rainfall
07-10-2016	22	110	12	18	174	East to west Sunny
28-10-2016	66	230	21	24	387	East to west Sunny
14-11-2016	38	218	19	22	384	North East to South West, Sunny
29-11-2016	30	158	19	25	456	East to West, Sunny & Cloudy
14-12-2016	57	64	12	17	247	West to East, Sunny
30-12-2016	77	264	22	19	348	South to West, Sunny
13-01-2017	93	132	6	17	211	East to West, Sunny
30-01-2017	85	259	10	21	350	East to West, Sunny
15-02-2017	122	167	5	19	405	South to North Sunny
28-02-2017	136	343	6	29	656	South to North Sunny
15-03-2017	100	105	6.89	<6	174	West to East, Sunny
30-03-2017	39	217	2.11	8	272	East to West, Sunny
Brief Statistics	**PM_{25}**	**RPM**	**SO_2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**136**	**343**	**22**	**29**	**656**	
Minimum	**16.00**	**42.00**	**2.11**	**6.00**	**54.00**	
Average	**59.90**	**157.45**	**10.94**	**18.00**	**280.50**	
95 Percentile	**122.70**	**267.95**	**21.15**	**27.40**	**466.00**	
98 Percentile	**130.68**	**312.98**	**21.66**	**28.36**	**580.00**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

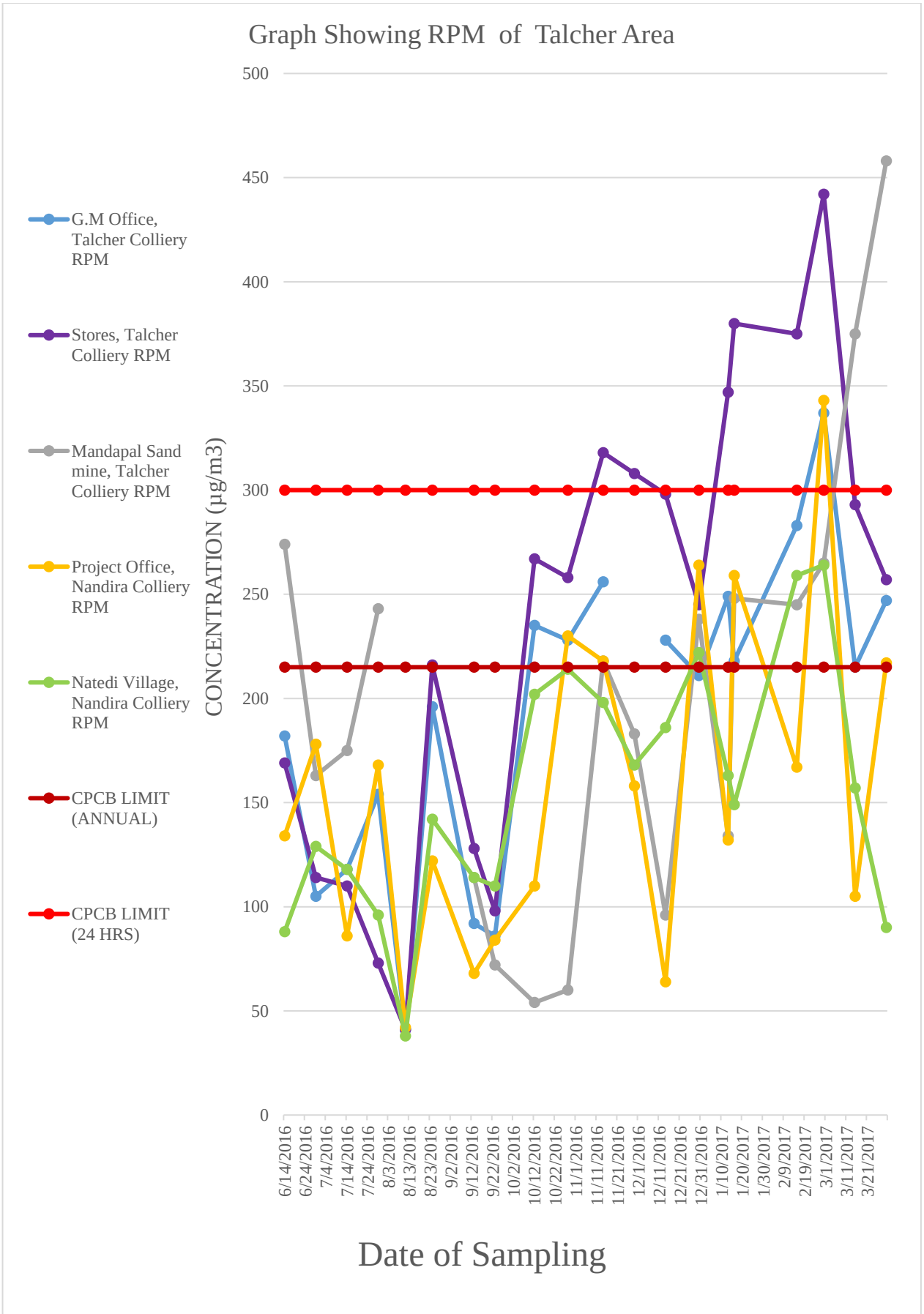
Table : 41
U/G: Nandira Colliery
Monitoring Station: Natedi Village, Nandira Colliery

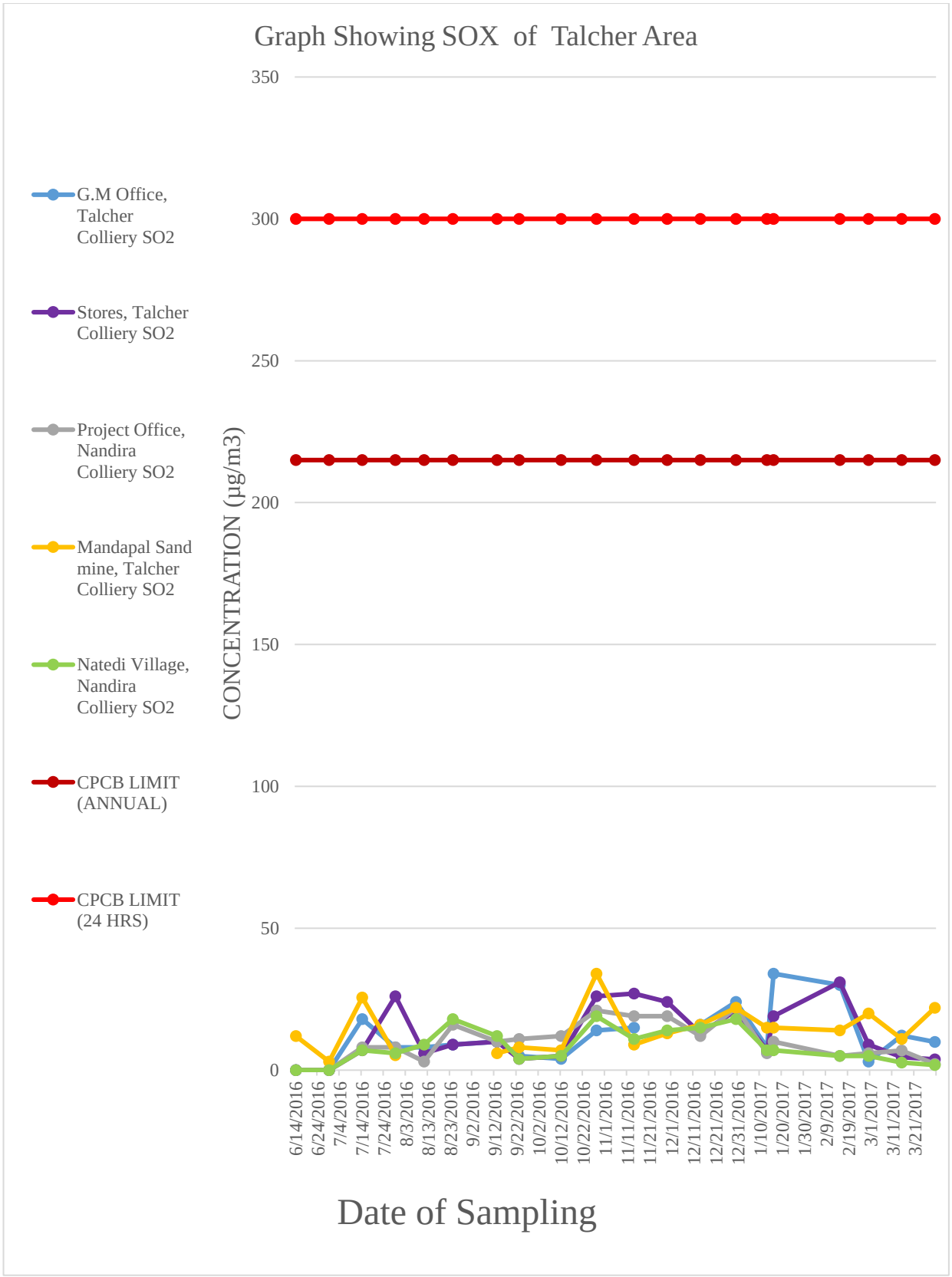
Date of Sampling	$PM_{2.5}$	RPM	SO_2	NOx	SPM	Remarks
14-06-2016	64	88	<25	<6	182	West to East Sunny
29-06-2016	62	129	<25	11	254	West to East Sunny
14-07-2016	38	118	7	11	249	East to West sunny and rainfall
29-07-2016	46	96	6	12	168	South to north cloudy and rainfall
12-08-2016	14	38	9	14	60	West to east rainfall
25-08-2016	48	142	18	14	218	South to north Sunny & Evening Rainfall
14-09-2016	38	114	12	<6	182	East to west cloudy & evening rainfall
27-09-2016	28	110	4	<6	166	West to East cloudy & evening rainfall
07-10-2016	66	202	5	8	308	East to west Sunny
28-10-2016	31	214	19	25	340	East to west Sunny
14-11-2016	36	198	11	14	282	North East to South West, Sunny
29-11-2016	38	168	14	11	347	East to West, Sunny & Cloudy
14-12-2016	63	186	15	20	329	West to East, Sunny
30-12-2016	122	222	18	<6	304	South to West, Sunny
13-01-2017	123	163	7	16	373	East to West, Sunny
30-01-2017	109	149	7	8	317	East to West, Sunny
15-02-2017	118	259	5	13	438	South to North Sunny
28-02-2017	150	264	5	26	625	South to North Sunny
15-03-2017	127	157	2.67	19	246	West to East, Sunny
30-03-2017	42	90	1.83	6	227	East to West, Sunny
Brief Statistics	**$PM_{2.5}$**	**RPM**	**SO_2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**150**	**264**	**19**	**26**	**625**	
Minimum	**14.00**	**38.00**	**1.83**	**6.00**	**60.00**	
Average	**68.15**	**155.35**	**9.25**	**14.25**	**280.75**	
95 Percentile	**128.15**	**259.25**	**18.15**	**25.25**	**447.35**	
98 Percentile	**141.26**	**262.10**	**18.66**	**25.70**	**553.94**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	

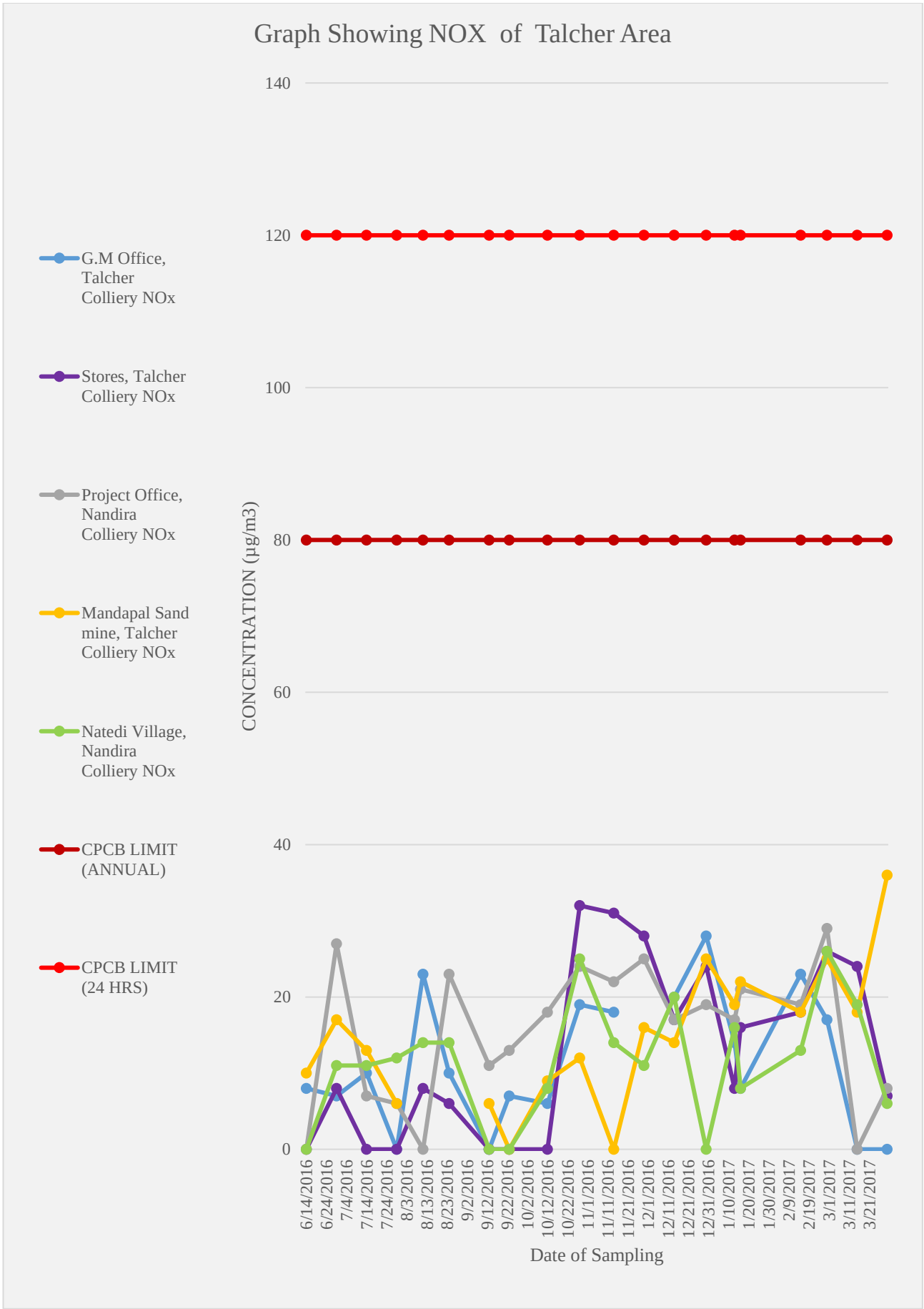
Table :42
U/G: Talcher Colliery
Monitoring Station: Mandapal Sand mine, Talcher Colliery

Date of Sampling	PM_{25}	RPM	SO_2	NOx	SPM	Remarks
01-02-2017	221	274	12	10	402	East to West, Sunny
16-02-2017	85	163	3	17	221	West to East Sunny
01-03-2017	169	175	25.61	13	372	East to West, Sunny
16-03-2017	215	243	5.28	6	512	West to East, Sunny
14-07-2016	54	114	6	6	224	East to West sunny and rainfall
27-07-2016	20	72	8	<6	106	South to north cloudy and rainfall
04-08-2016	26	54	7	9	68	East to west rainfall
17-08-2016	20	60	34	12	94	East to West Sunny
06-09-2016	22	218	9	<6	321	East to west cloudy & rainfall
19-09-2016	52	183	13	16	341	East to west cloudy
03-10-2016	34	96	16	14	144	West to East cloudy
17-10-2016	70	238	22	25	406	East to west Sunny
01-11-2016	34	134	15	19	232	North East to South West, Sunny
16-11-2016	56	248	15	22	404	West to East, Sunny & Cloudy
01-12-2016	136	245	14	18	512	East to West, Sunny
16-12-2016	50	265	20	25	325	South to West, Sunny
03-01-2017	176	375	11	18	522	South to North Sunny
17-01-2017	36	458	22	36	643	East to West, Sunny
Brief Statistics	**PM_{25}**	**RPM**	**SO_2**	**NOx**	**SPM**	All values in µg/m3
Maximum	**221**	**458**	**34**	**36**	**643**	
Minimum	**20**	**54**	**3**	**6**	**68**	
Average	**82.00**	**200.83**	**14.33**	**16.63**	**324.94**	
95 Percentile	**215.90**	**387.45**	**26.87**	**27.75**	**540.15**	
98 Percentile	**218.96**	**429.78**	**31.15**	**32.70**	**601.86**	
Standard (24 Hrs)	**60**	**300**	**120**	**120**	**600**	
Standard (Annual)	**40**	**215**	**80**	**80**	**430**	


Graph Showing PM2.5 of Talcher Area
250
200
150
100
50
0
CONCENTRATION (µg/m3)
G.M Office,Talcher Colliery PM2 5
Stores, Talcher Colliery PM2 5
Mandapal Sand mine, Talcher Colliery PM2 5
Project Office, Nandira Colliery PM2 5
Natedi Village, Nandira Colliery PM2 5
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling


Graph Showing RPM of Talcher Area
G.M Office, Talcher Colliery RPM
Stores, Talcher Colliery RPM
Mandapal Sand mine, Talcher Colliery RPM
Project Office, Nandira Colliery RPM
Natedi Village, Nandira Colliery RPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
500
450
400
350
300
250
200
150
100
50
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling


Graph Showing SOX of Talcher Area
G.M Office, Talcher Colliery SO2
Stores, Talcher Colliery SO2
Project Office, Nandira Colliery SO2
Mandapal Sand mine, Talcher Colliery SO2
Natedi Village, Nandira Colliery SO2
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
350
300
250
200
150
100
50
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling


Graph Showing NOX of Talcher Area
140
120
100
80
60
40
20
0
CONCENTRATION (µg/m3)
G.M Office, Talcher Colliery NOx
Stores, Talcher Colliery NOx
Project Office, Nandira Colliery NOx
Mandapal Sand mine, Talcher Colliery NOx
Natedi Village, Nandira Colliery NOx
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

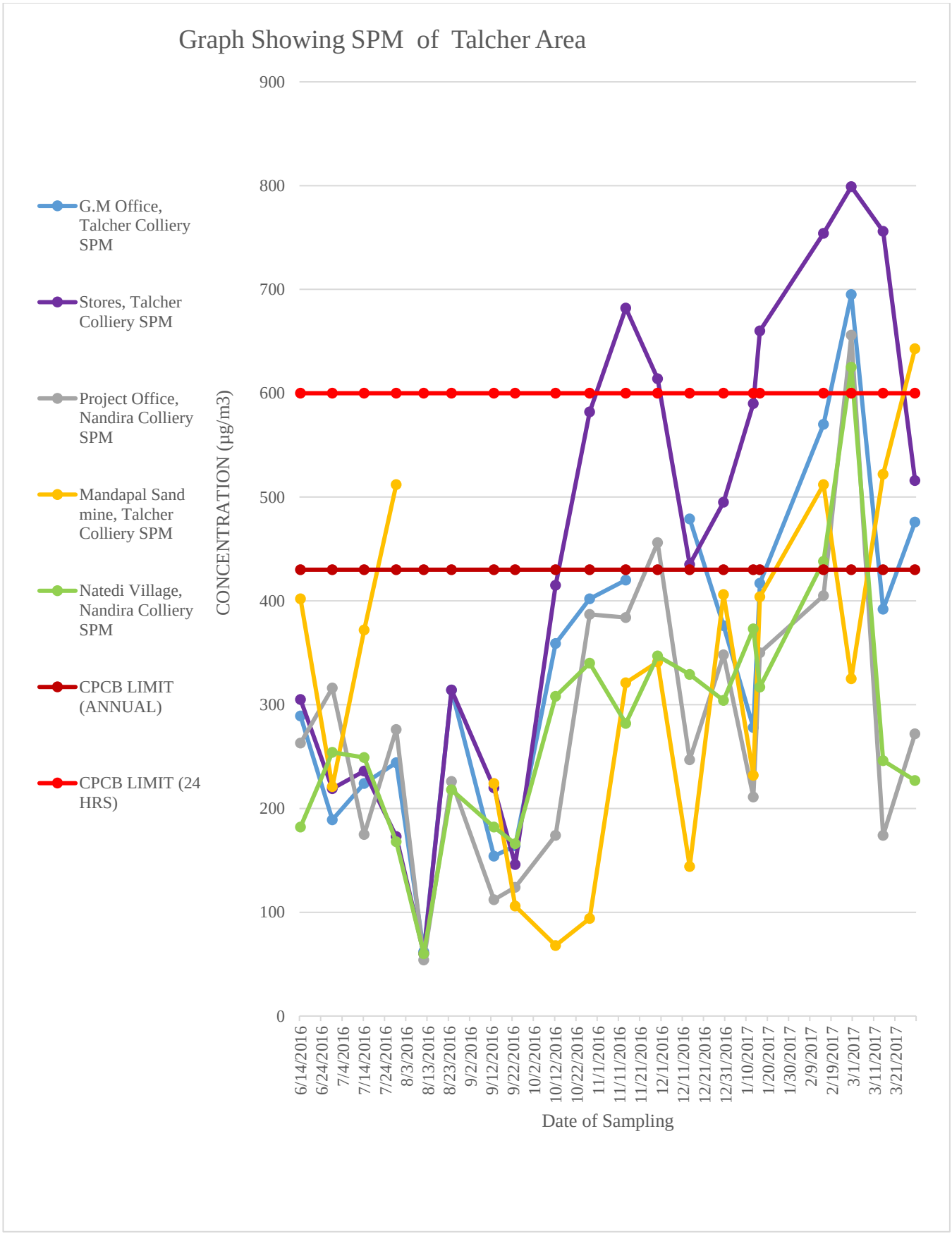

Graph Showing SPM of Talcher Area
G.M Office, Talcher Colliery SPM
Stores, Talcher Colliery SPM
Project Office, Nandira Colliery SPM
Mandapal Sand mine, Talcher Colliery SPM
Natedi Village, Nandira Colliery SPM
CPCB LIMIT (ANNUAL)
CPCB LIMIT (24 HRS)
CONCENTRATION (µg/m3)
900
800
700
600
500
400
300
200
100
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table:43
Project: Bhubaneswari OCP
Monitoring Station: Raghunathpur Village

DATE OF SAMPLING	DAY	NIGHT
07-06-2016	55.9	57.7
22-06-2016	59.8	58.9
12-07-2016	56.2	56
27-07-2016	56.5	55.9
10-08-2016	58.1	55.1
22-08-2016	55.2	55.8
09-09-2016	57	55.4
22-09-2016	56.1	54.4
13-10-2016	56.3	55.6
24-10-2016	57.2	55.1
11-11-2016	56	57
24-11-2016	57.5	55
09-12-2016	60.2	58.4
26-12-2016	55.4	59.2
06-01-2017	55.4	54.7
20-01-2017	57.2	54.3
09-02-2017	58.3	55.4
24-02-2017	56	52.6
09-03-2017	57.6	57.2
24-03-2017	55	53.3
Brief Statistic	**Day**	**Night**
Minimum	**55.00**	**52.60**
Maximum	**60.20**	**59.20**
Mean	**56.85**	**55.85**
Noise Standard	**75**	**70**

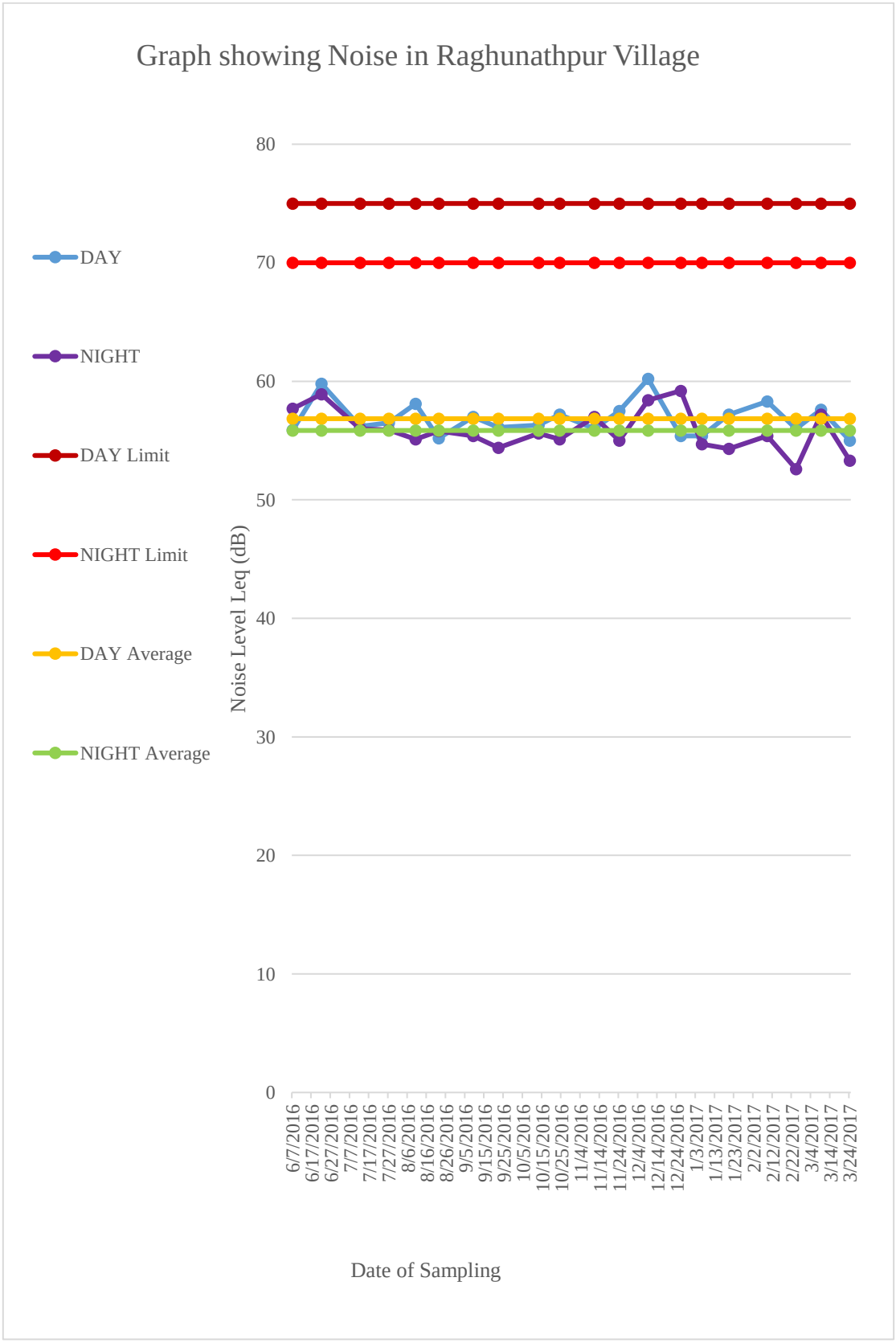

Graph showing Noise in Raghunathpur Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling

Table:44
Project: Bhubaneswari OCP
Monitoring Station: S-E of Mine (A2)

DATE OF SAMPLING	DAY	NIGHT
07-06-2016	61.2	62.4
22-06-2016	63.2	60.6
12-07-2016	60.6	61.8
27-07-2016	67.6	61.9
10-08-2016	64.2	63.9
23-08-2016	63	62.8
12-09-2016	63.7	63.4
26-09-2016	63.6	62.9
13-10-2016	63.4	62.9
24-10-2016	62.7	63.7
11-11-2016	61.9	64.8
24-11-2016	63.5	66.2
09-12-2016	66.9	63.8
26-12-2016	64.5	63.9
06-01-2017	64.2	61.3
20-01-2017	64.8	64.5
09-02-2017	66	63.7
24-02-2017	65	64.2
09-03-2017	66.4	67.6
25-03-2017	64.5	69
Brief Statistic	**Day**	**Night**
Minimum	**60.60**	**60.60**
Maximum	**67.60**	**69.00**
Mean	**64.05**	**63.77**
Noise Standard	**75**	**70**

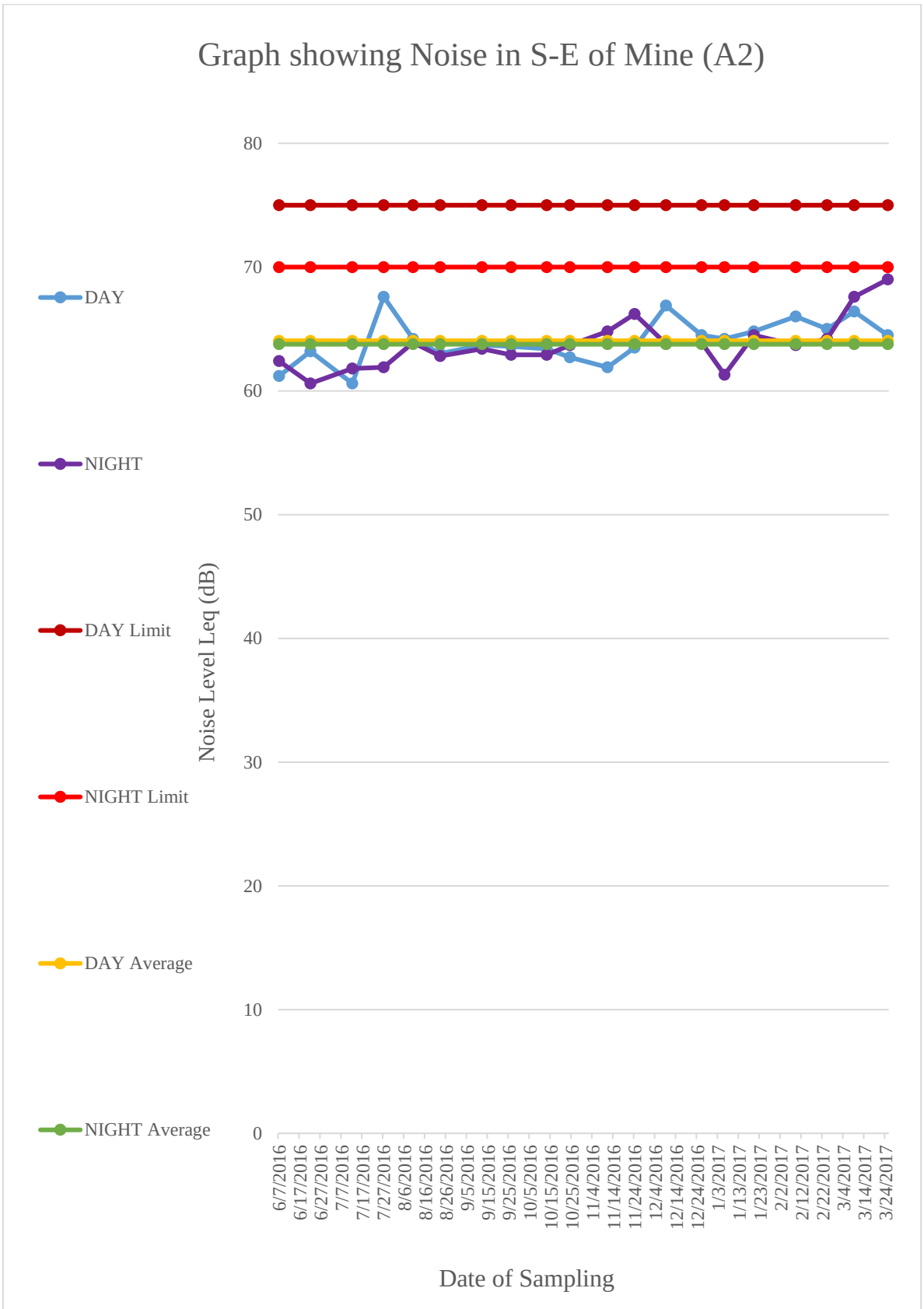

Graph showing Noise in S-E of Mine (A2)
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling

Table: 45

Project: Bhubaneswari OCP

Monitoring Station: N-E of Mine (A1)

DATE OF SAMPLING	DAY	NIGHT
07-06-2016	65.5	62.6
22-06-2016	64.3	62.8
12-07-2016	61.8	60.5
27-07-2016	62	63.1
10-08-2016	63.8	63
23-08-2016	62.3	63.5
12-09-2016	62.8	63
26-09-2016	64.3	64.6
13-10-2016	62.8	62.1
24-10-2016	63.8	63.2
11-11-2016	67.4	66
24-11-2016	64.1	64
09-12-2016	67.2	65.4
26-12-2016	60.4	61
06-01-2017	63.6	60.7
20-01-2017	60.9	62.8
09-02-2017	62.9	61
24-02-2017	59.7	62.1
09-03-2017	62.9	62.6
25-03-2017	64.4	66.6
Brief Statistic	**Day**	**Night**
Minimum	59.70	60.50
Maximum	67.40	66.60
Mean	63.35	63.03
Noise Standard	**75**	**70**

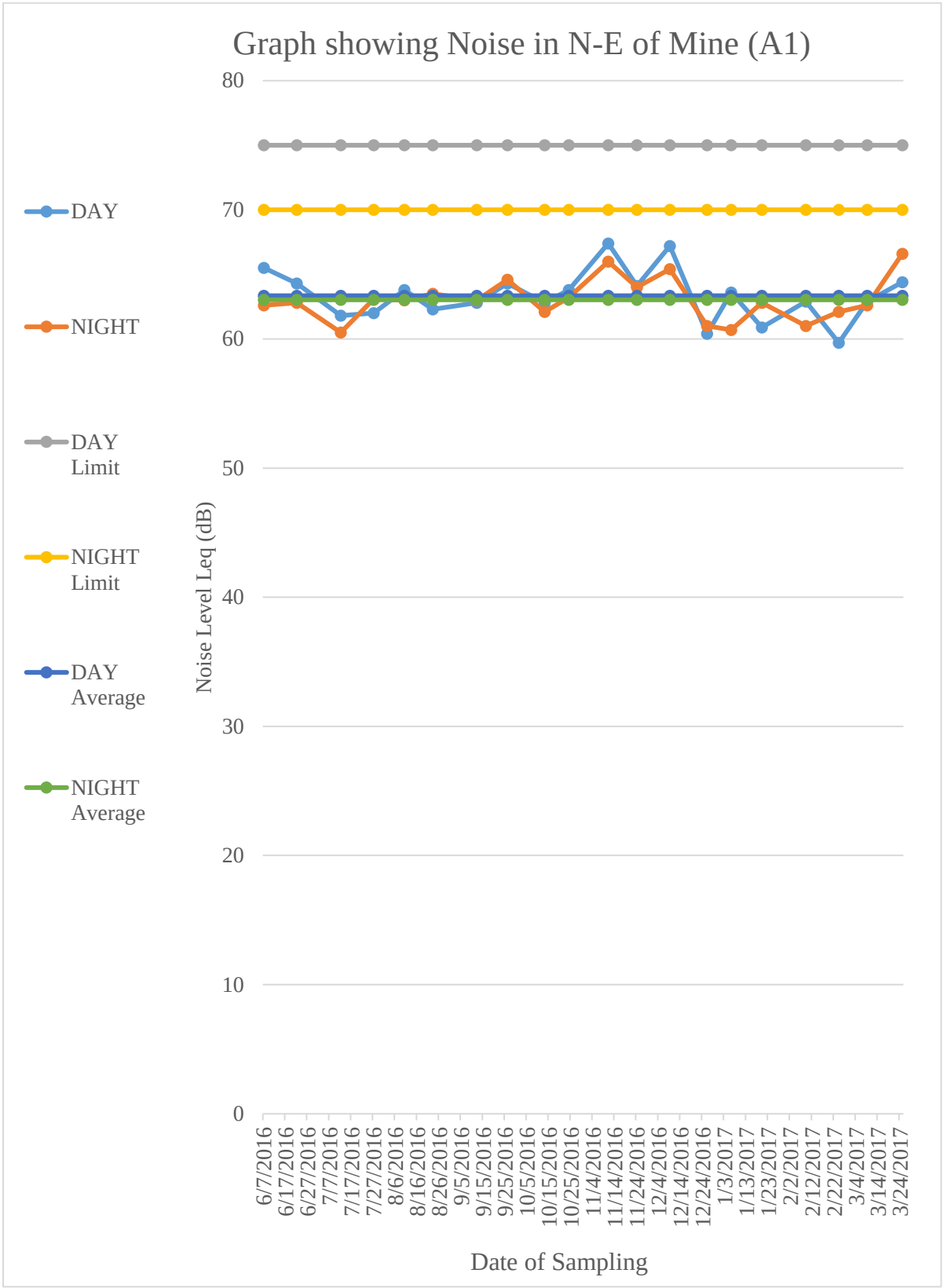

Graph showing Noise in N-E of Mine (A1)
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling

Table:46

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

DATE OF SAMPLING	DAY	NIGHT
07-06-2016	58.1	59.1
22-06-2016	62.3	61.1
12-07-2016	62.3	58.2
27-07-2016	57.5	58.8
10-08-2016	59.8	57.2
22-08-2016	59.8	57.3
09-09-2016	59.8	56.2
22-09-2016	58.3	56.3
13-10-2016	60	58.3
24-10-2016	59	56.3
11-11-2016	56.1	57.4
24-11-2016	56.9	55.3
09-12-2016	69.4	65.1
26-12-2016	62.4	61.3
06-01-2017	57.4	56.7
20-01-2017	60	56.2
09-02-2017	59.8	57.9
24-02-2017	60.2	57.5
09-03-2017	61.4	59.8
24-03-2017	58.2	59.6
Brief Statistic	**Day**	**Night**
Minimum	**56.10**	**55.30**
Maximum	**69.40**	**65.10**
Mean	**59.94**	**58.28**
Noise Standard	**75**	**70**

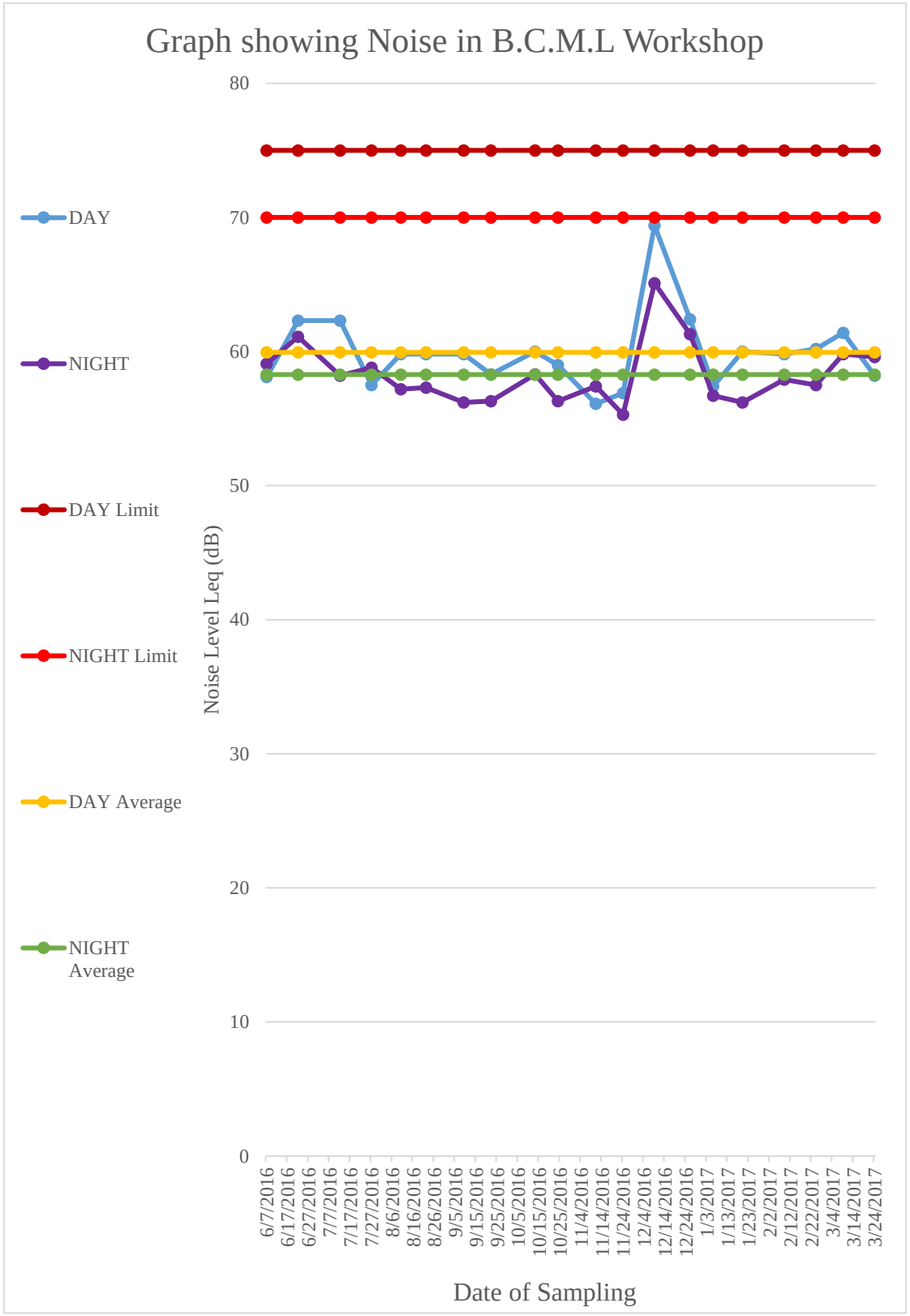

Graph showing Noise in B.C.M.L Workshop
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/7/2016
6/17/2016
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
2/22/2017
3/4/2017
3/14/2017
3/24/2017
Date of Sampling

Table:47
Project: Jagannath OCP
Monitoring Station: Jaganath Colony(A2)

DATE OF SAMPLING	DAY	NIGHT
09-06-2016	60	59.6
24-06-2016	58.2	54.2
07-07-2016	59.6	59.5
22-07-2016	57	57.3
12-08-2016	59.4	57.4
25-08-2016	59.6	57.6
14-09-2016	57.2	55.3
27-09-2016	57.3	56
14-10-2016	58.8	56.4
26-10-2016	58.4	56.8
09-11-2016	60.8	58.4
28-11-2016	60.5	55.3
13-12-2016	61.5	59.8
27-12-2016	60.1	58.1
10-01-2017	60.5	57.4
24-01-2017	58.5	60.9
14-02-2017	57.1	60
27-02-2017	58.2	59.5
10-03-2017	60.2	54.8
27-03-2017	56.8	58.4
Brief Statistic	**Day**	**Night**
Minimum	56.80	54.20
Maximum	61.50	60.90
Mean	58.99	57.64
Noise Standard	**75**	**70**

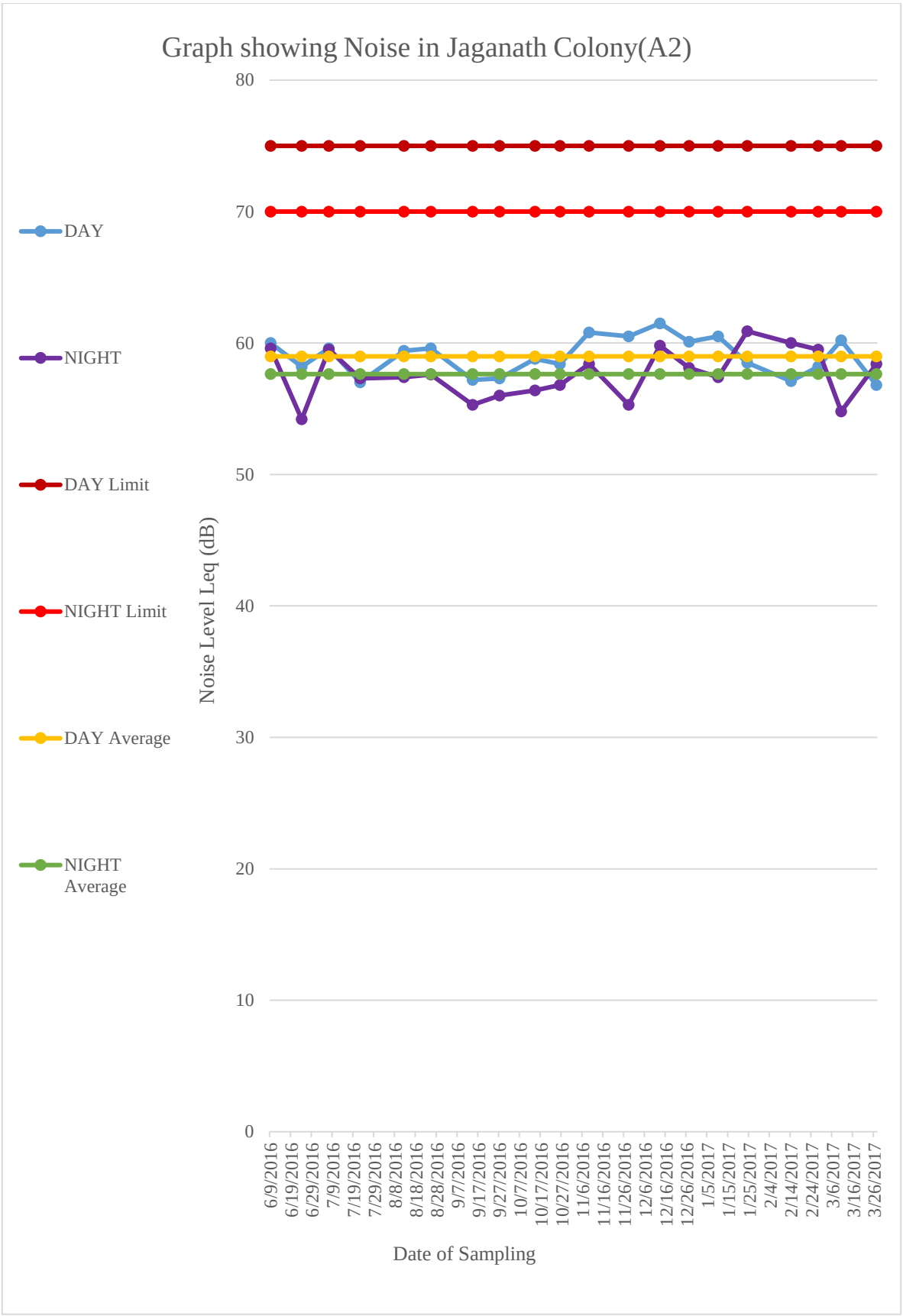

Graph showing Noise in Jaganath Colony(A2)
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling

Table: 48

Project: Jagannath OCP

Monitoring Station: Jagannath OCP-Time Office(A1)

DATE OF SAMPLING	DAY	NIGHT
09-06-2016	62	61.1
24-06-2016	64.1	63.6
07-07-2016	63.4	60.1
22-07-2016	60.7	65
12-08-2016	63.2	62
25-08-2016	63.5	62.1
14-09-2016	63.1	61.5
27-09-2016	62	61.1
14-10-2016	62.6	62.1
26-10-2016	62.6	62
09-11-2016	66.4	61.1
28-11-2016	62.1	62
13-12-2016	59.9	57.5
27-12-2016	61.8	59.7
10-01-2017	61	62.1
24-01-2017	60.9	63.4
14-02-2017	62.7	62
27-02-2017	62	60.6
10-03-2017	63.2	61
27-03-2017	65.5	58.6
Brief Statistic	**Day**	**Night**
Minimum	**59.90**	**57.50**
Maximum	**66.40**	**65.00**
Mean	**62.64**	**61.43**
Noise Standard	**75**	**70**

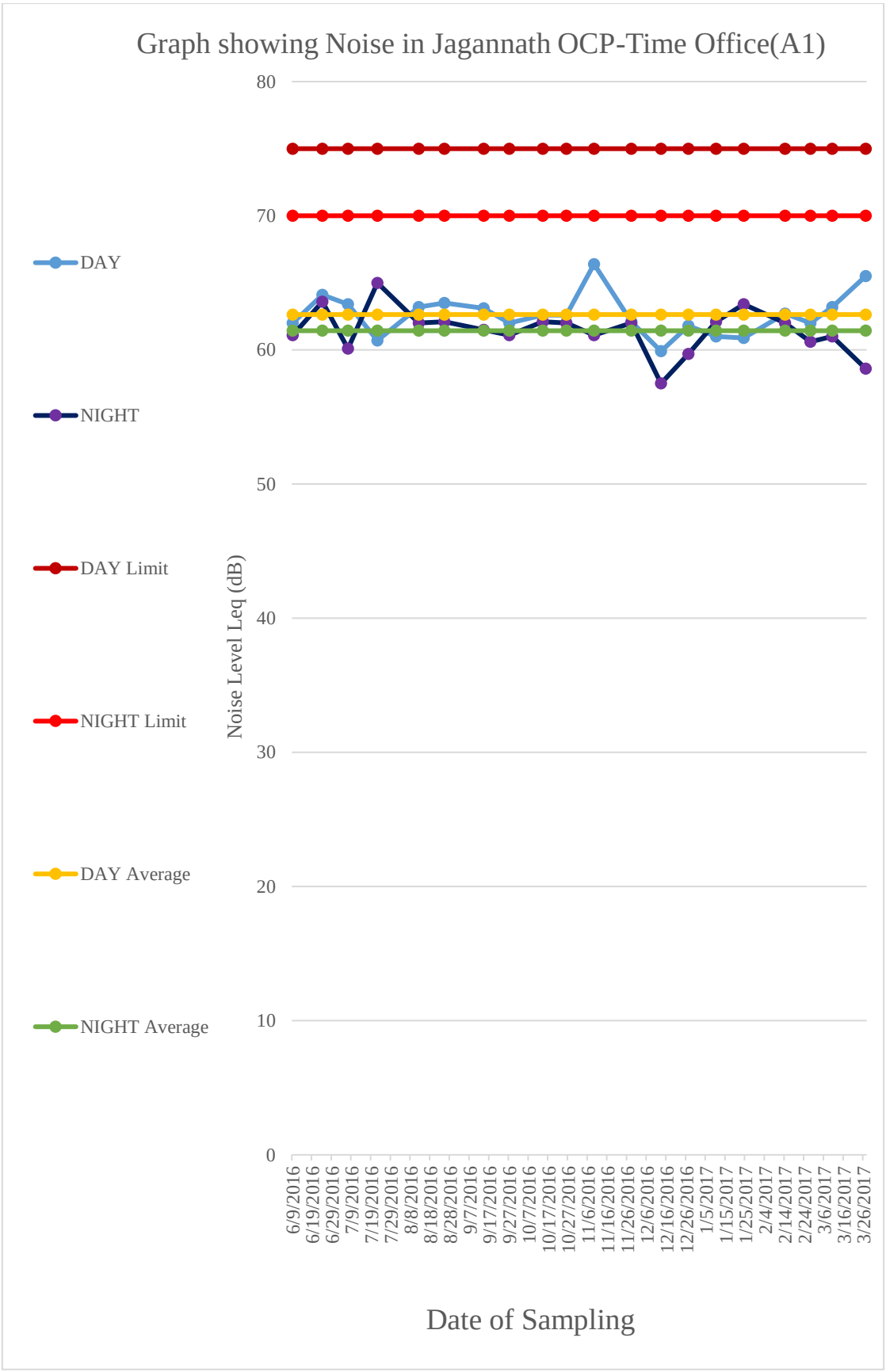

Graph showing Noise in Jagannath OCP-Time Office(A1)
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling

Table: 49

Project: Jagannath OCP

Monitoring Station: Near West sump(A3)

DATE OF SAMPLING	DAY	NIGHT
09-06-2016	64.2	63.5
24-06-2016	64.2	61.6
07-07-2016	63.4	62.7
22-07-2016	61	60.9
12-08-2016	63.7	62.3
25-08-2016	64.1	62.8
14-09-2016	63.7	62.3
27-09-2016	63.4	62.3
14-10-2016	62.3	61.5
26-10-2016	63	62.4
09-11-2016	63.9	64
28-11-2016	65.2	64.3
13-12-2016	64.2	62.4
27-12-2016	60.2	61.3
10-01-2017	65.3	62.8
24-01-2017	64.6	66.6
14-02-2017	64.3	62.9
27-02-2017	65.6	65.9
10-03-2017	62.7	62.1
27-03-2017	63.4	66.4
Brief Statistic	**Day**	**Night**
Minimum	**60.20**	**60.90**
Maximum	**65.60**	**66.60**
Mean	**63.62**	**63.05**
Noise Standard	**75**	**70**

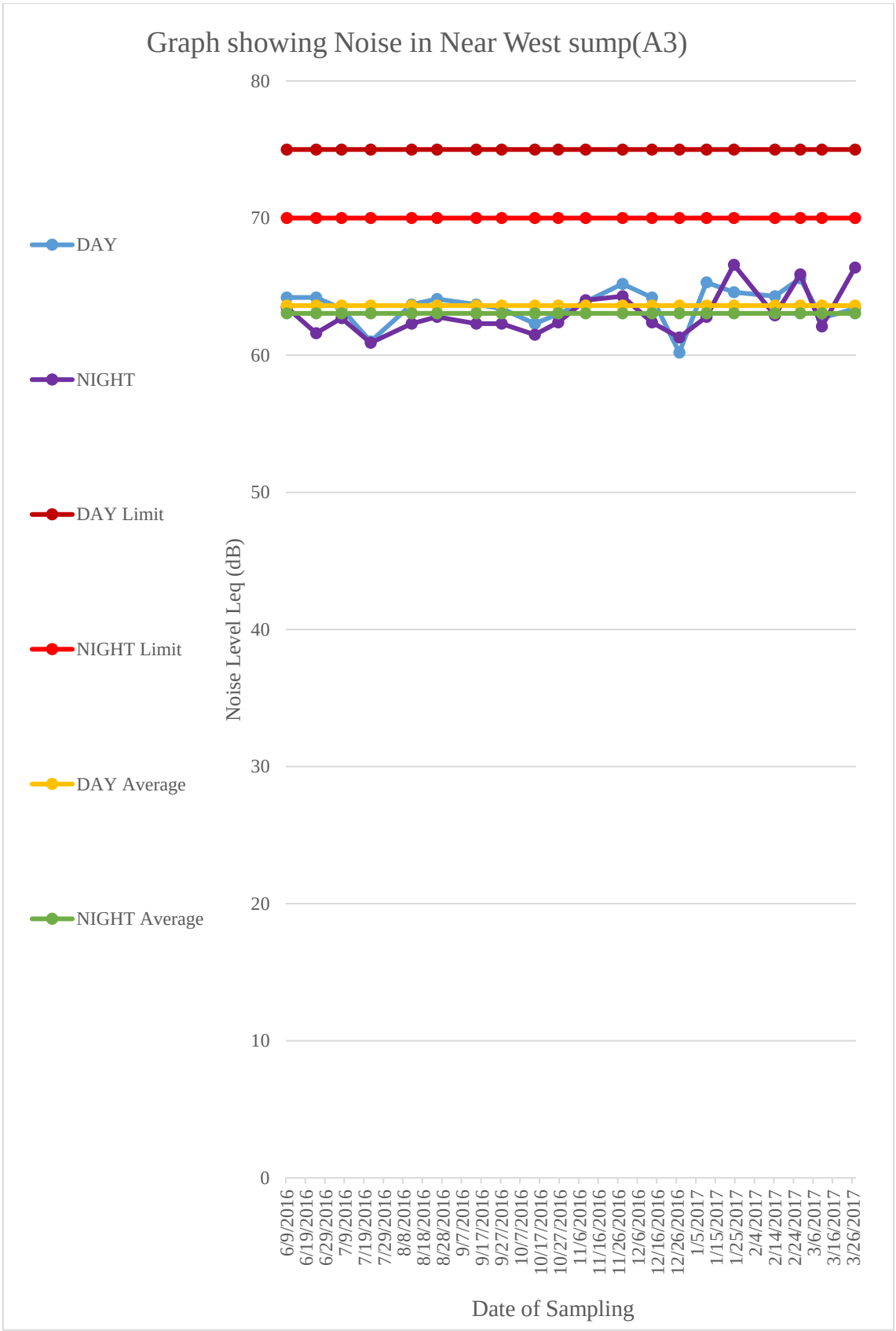

Graph showing Noise in Near West sump(A3)
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/9/2016
6/19/2016
6/29/2016
7/9/2016
7/19/2016
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Date of Sampling

Table: 50

Project: Ananta OCP

Monitoring Station: Ananta Vihar Colony

DATE OF SAMPLING	DAY	NIGHT
08-06-2016	61.4	57.4
23-06-2016	61.4	60
08-07-2016	60.6	59.5
25-07-2016	62.3	60.7
11-08-2016	59.7	57.8
24-08-2016	61.2	57.7
13-09-2016	58.4	56.3
23-09-2016	58.2	55.6
12-10-2016	58.7	56.7
25-10-2016	59.3	57.3
10-11-2016	61.3	61.3
25-11-2016	61.6	58.6
12-12-2016	63.6	60.6
28-12-2016	57.5	58
11-01-2017	58.3	59.9
25-01-2017	57.6	57.9
10-02-2017	59.7	58.1
25-02-2017	56.3	56
11-03-2017	57.4	56.3
28-03-2017	59.9	59
Brief Statistic	**Day**	**Night**
Minimum	**56.3**	**55.6**
Maximum	**63.6**	**61.3**
Mean	**59.72**	**58.24**
Noise Standard	**75**	**70**

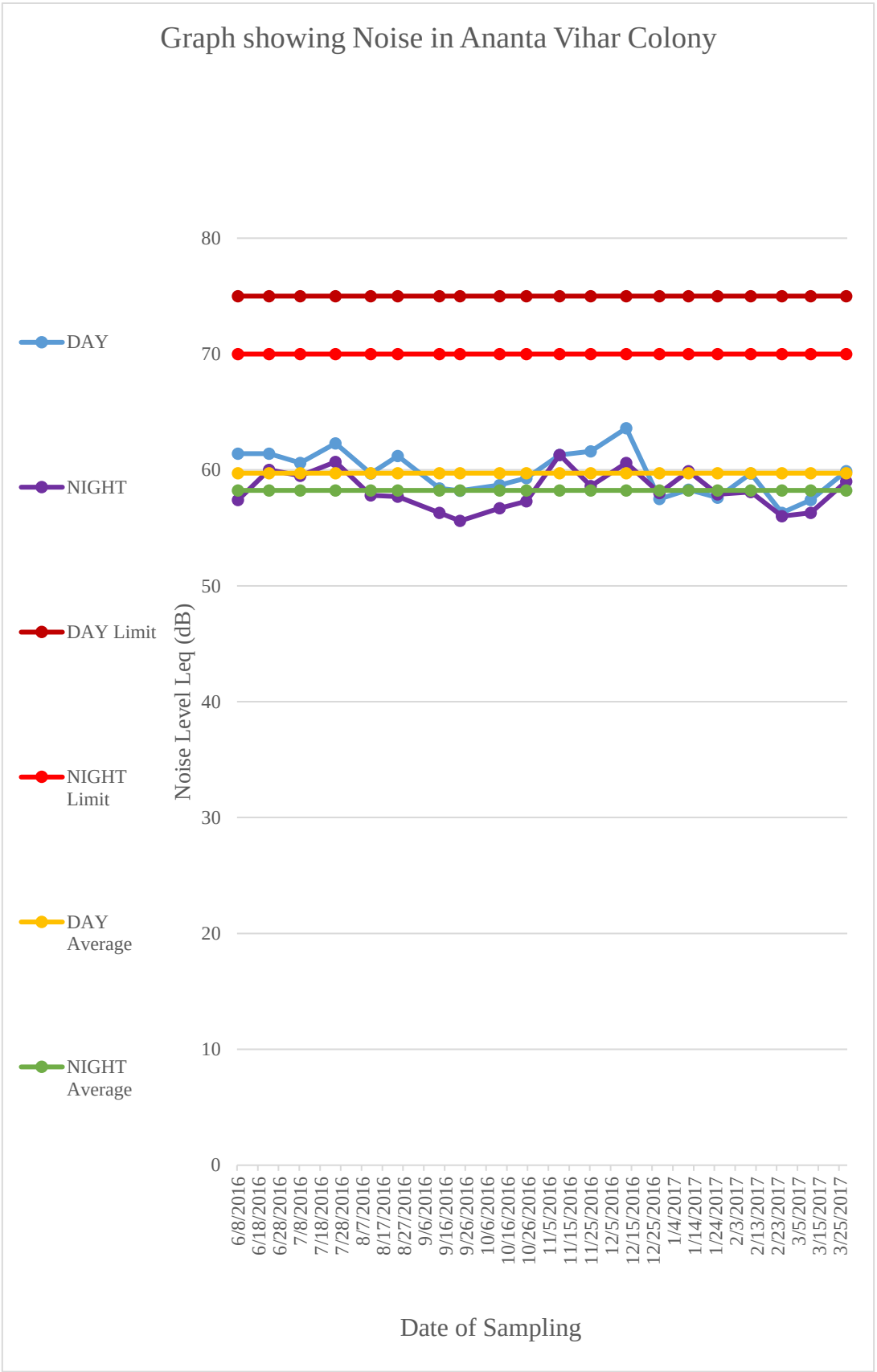

Graph showing Noise in Ananta Vihar Colony
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

Table:51
Project: Ananta OCP
Monitoring Station: Near Talcher West underground (A2)

DATE OF SAMPLING	DAY	NIGHT
08-06-2016	66.7	62.1
23-06-2016	64.2	61.8
08-07-2016	62.8	60.8
25-07-2016	66.9	61.6
11-08-2016	63.9	63.7
24-08-2016	63.6	63.4
13-09-2016	61.8	61.9
23-09-2016	62.7	62.3
12-10-2016	63	61.8
25-10-2016	63.4	62.4
10-11-2016	63.4	67.5
25-11-2016	62	63.5
12-12-2016	66.5	58.2
28-12-2016	65.6	63.2
11-01-2017	64.6	64.2
25-01-2017	64.5	66.7
10-02-2017	64.2	64.3
25-02-2017	36.7	65.5
11-03-2017	67	62.7
28-03-2017	64.6	65.1
Brief Statistic	**Day**	**Night**
Minimum	**36.7**	**58.2**
Maximum	**67**	**67.5**
Mean	**62.91**	**63.14**
Noise Standard	**75**	**70**

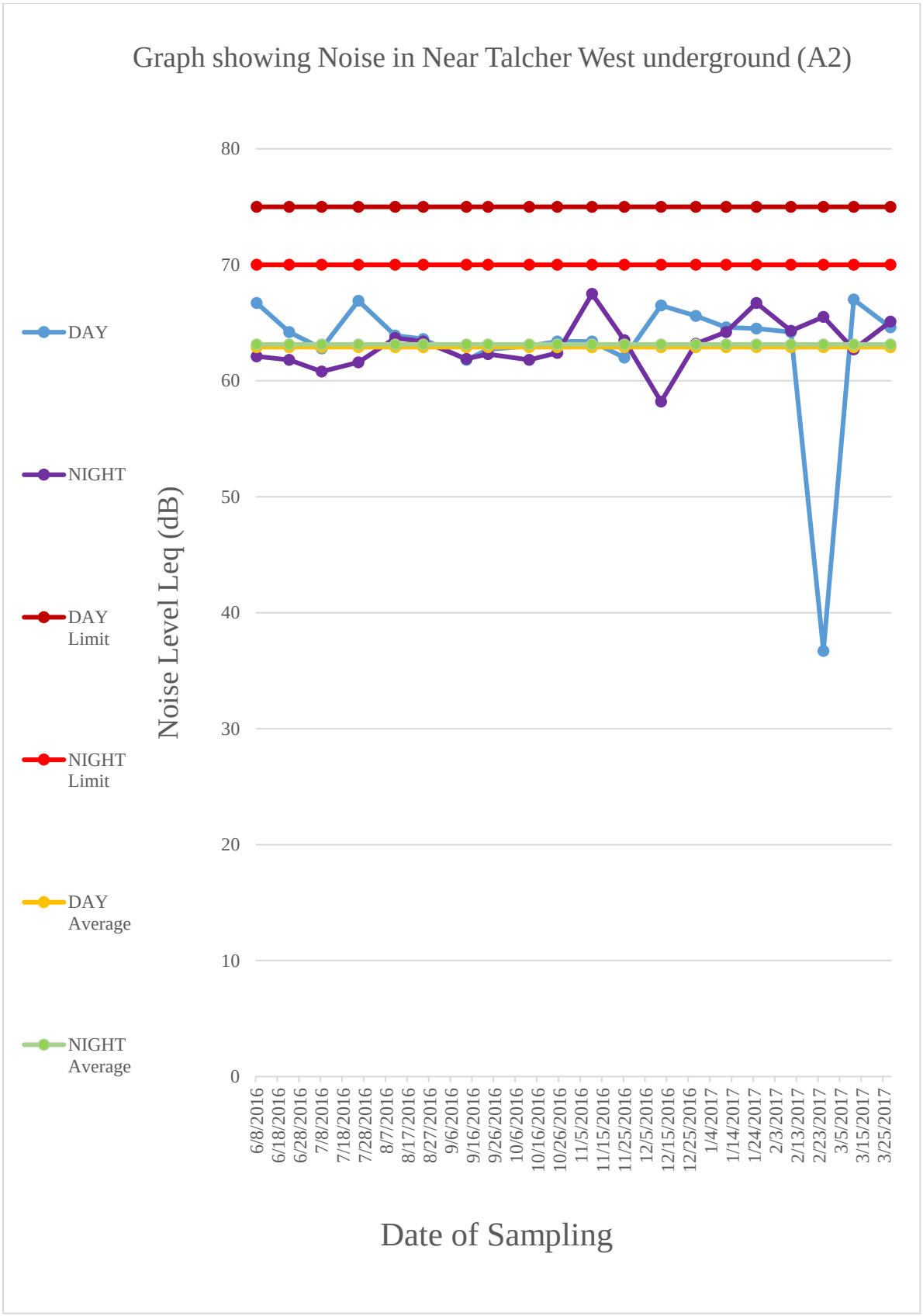

Graph showing Noise in Near Talcher West underground (A2)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

Table:52

Project: Ananta OCP

Monitoring Station: Near Ananta OC Project Office (A3)

DATE OF SAMPLING	DAY	NIGHT
08-06-2016	65.7	61.9
23-06-2016	65.6	63.2
08-07-2016	61.3	60.4
25-07-2016	66	61.9
11-08-2016	63.3	62.2
24-08-2016	64.1	62.8
13-09-2016	63.1	62.4
23-09-2016	64.8	63.2
12-10-2016	63.2	62.4
25-10-2016	63.7	63.2
10-11-2016	67	63.5
25-11-2016	61.9	64.4
12-12-2016	77.6	73.1
28-12-2016	66.5	63.9
11-01-2017	67.2	65.7
25-01-2017	62.2	66.3
10-02-2017	65.4	63.7
25-02-2017	63	64.4
11-03-2017	62.4	62.9
28-03-2017	65.1	66.7
Brief Statistic	**Day**	**Night**
Minimum	**61.3**	**60.4**
Maximum	**77.6**	**73.1**
Mean	**64.96**	**63.91**
Noise Standard	**75**	**70**

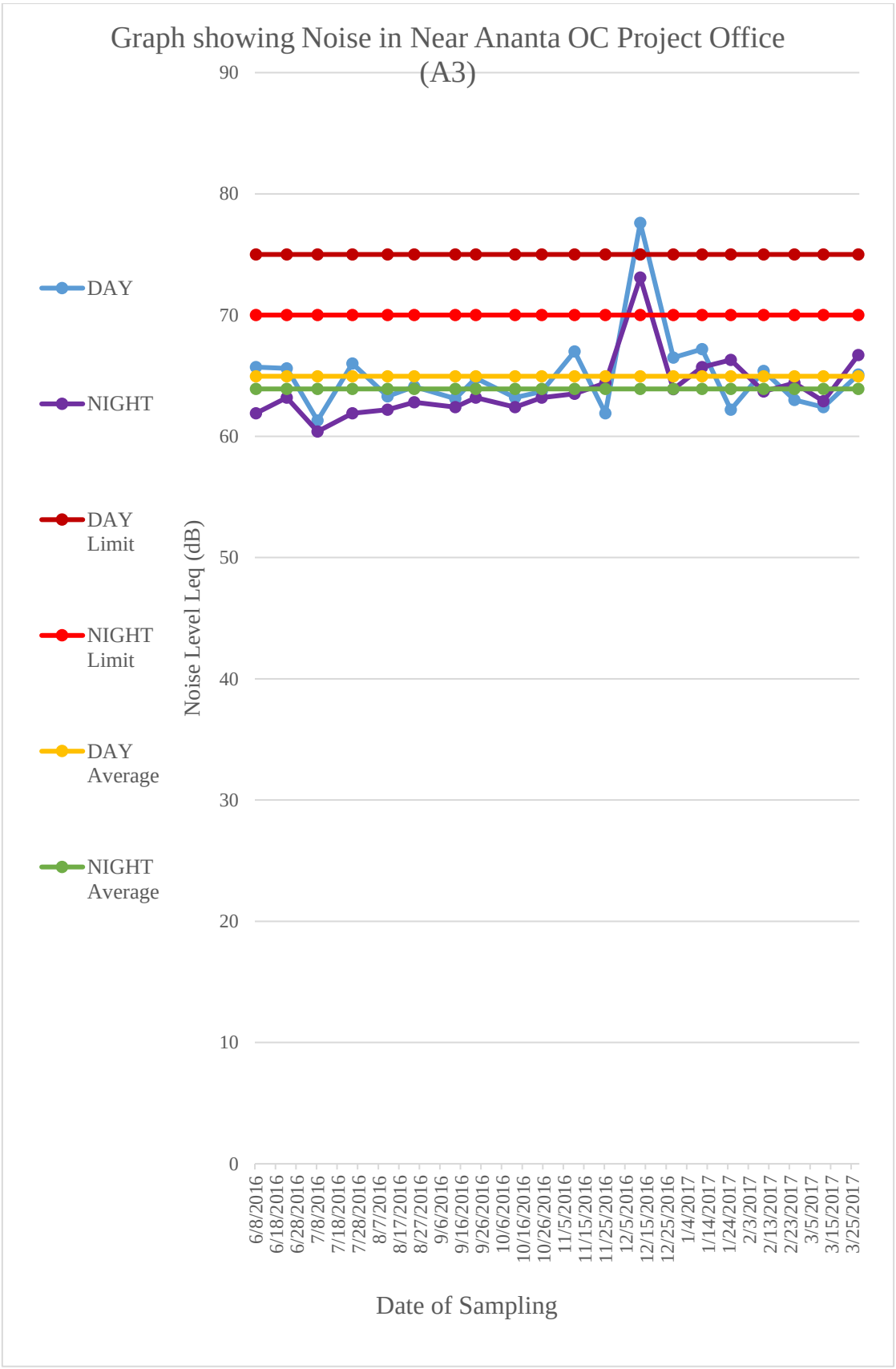

Graph showing Noise in Near Ananta OC Project Office (A3)
90
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

Table: 53
Project: Ananta OCP
Monitoring Station: Ananta expansion area (A1)

DATE OF SAMPLING	DAY	NIGHT
08-06-2016	65.7	61.9
23-06-2016	65.6	63.2
08-07-2016	66.6	63
25-07-2016	67.6	64.2
11-08-2016	65.2	63.8
24-08-2016	65.3	62.9
13-09-2016	62.7	62.4
23-09-2016	63.1	61.9
12-10-2016	62.6	61.5
25-10-2016	62.8	62.6
10-11-2016	64.1	65.2
25-11-2016	67	66.4
12-12-2016	69.6	60.2
28-12-2016	67.3	60.3
11-01-2017	66	62.7
25-01-2017	63.9	69.9
10-02-2017	61.7	62.9
25-02-2017	61.5	64.7
11-03-2017	66.3	63.5
28-03-2017	66.1	66.5
Brief Statistic	**Day**	**Night**
Minimum	**61.5**	**60.2**
Maximum	**69.6**	**69.9**
Mean	**65.04**	**63.49**
Noise Standard	**75**	**70**

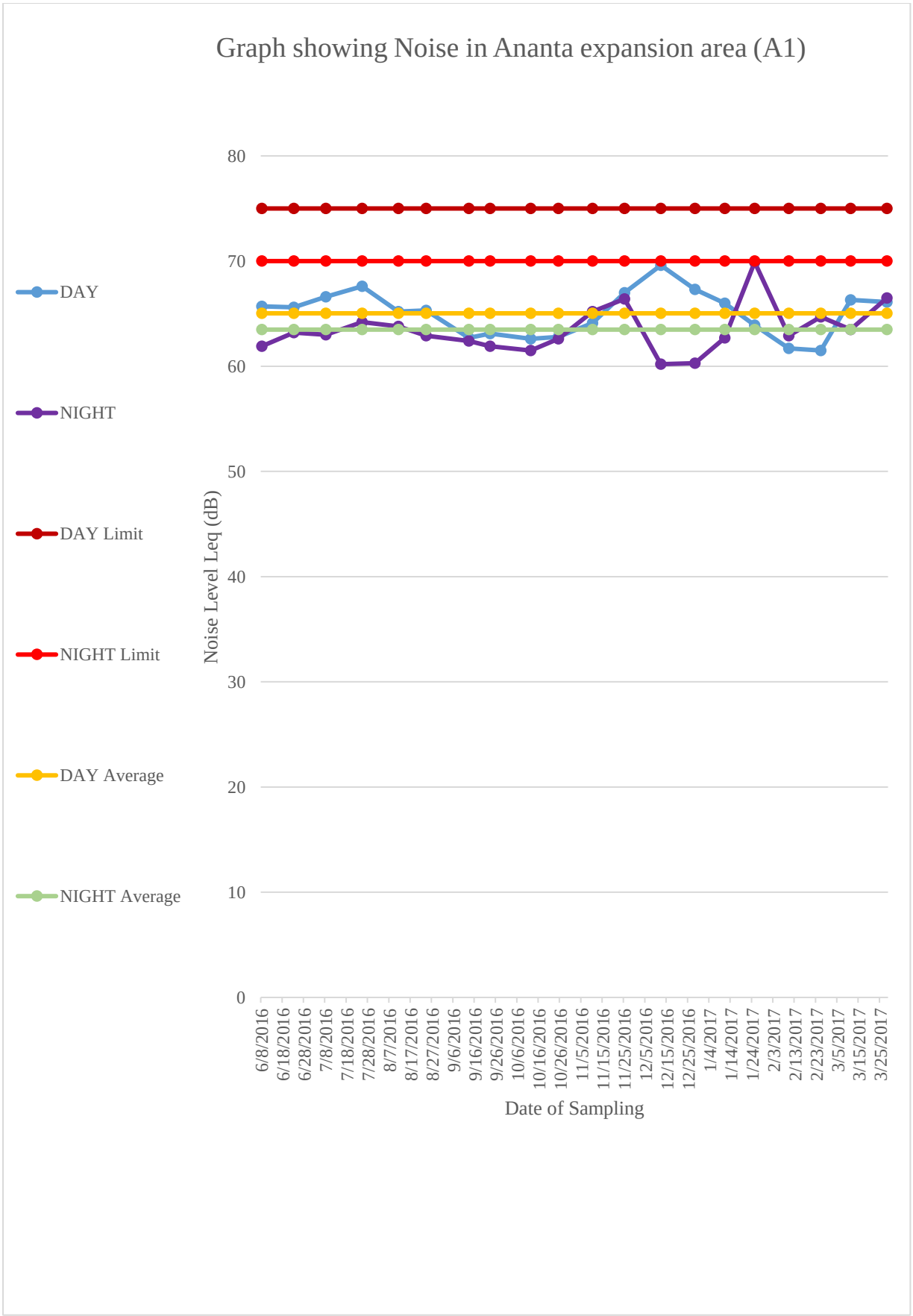

Graph showing Noise in Ananta expansion area (A1)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/8/2016
6/18/2016
6/28/2016
7/8/2016
7/18/2016
7/28/2016
8/7/2016
8/17/2016
8/27/2016
9/6/2016
9/16/2016
9/26/2016
10/6/2016
10/16/2016
10/26/2016
11/5/2016
11/15/2016
11/25/2016
12/5/2016
12/15/2016
12/25/2016
1/4/2017
1/14/2017
1/24/2017
2/3/2017
2/13/2017
2/23/2017
3/5/2017
3/15/2017
3/25/2017
Date of Sampling

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

DATE OF SAMPLING	DAY	NIGHT
09-08-2016	61.6	61
22-08-2016	58.4	57.9
09-09-2016	58.6	56.9
22-09-2016	57.7	55.9
06-10-2016	56.8	55.8
20-10-2016	55.7	55.1
08-11-2016	59.5	58
23-11-2016	58.3	56.9
06-12-2016	59.8	58.7
21-12-2016	65	57.4
09-01-2017	61	60.5
23-01-2017	58.1	57.8
08-02-2017	60	59.6
23-02-2017	57.6	57.4
08-03-2017	59.4	59.4
23-03-2017	59.1	58.7
Brief Statistic	**Day**	**Night**
Minimum	55.70	55.10
Maximum	65.00	61.00
Mean	59.16	57.94
Noise Standard	**75**	**70**

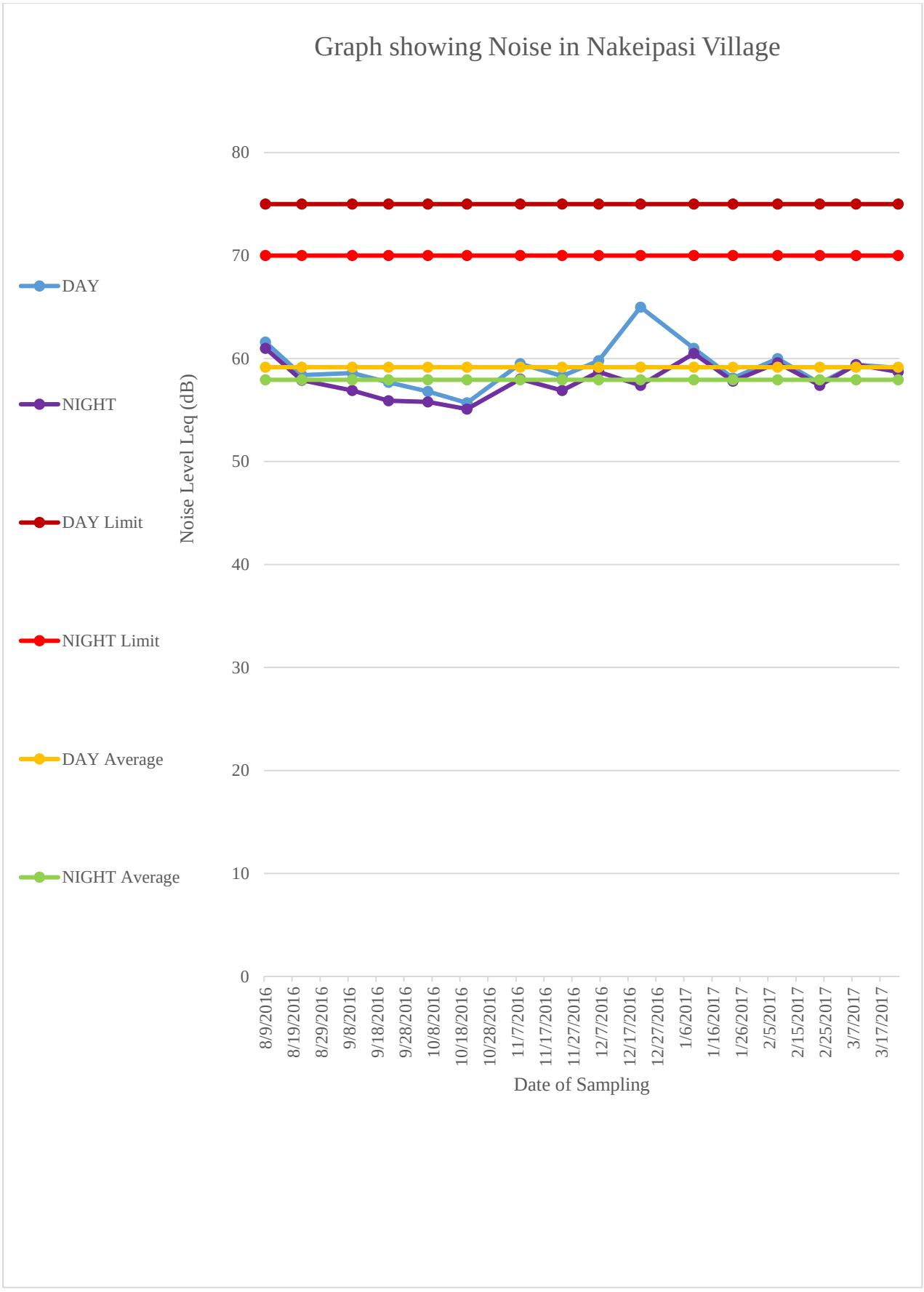

Graph showing Noise in Nakeipasi Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
8/9/2016
8/19/2016
8/29/2016
9/8/2016
9/18/2016
9/28/2016
10/8/2016
10/18/2016
10/28/2016
11/7/2016
11/17/2016
11/27/2016
12/7/2016
12/17/2016
12/27/2016
1/6/2017
1/16/2017
1/26/2017
2/5/2017
2/15/2017
2/25/2017
3/7/2017
3/17/2017
Date of Sampling

Table: 55

Project: Bharatpur OCP

Monitoring Station: Near civil maintenance office of Hingula Area

DATE OF SAMPLING	DAY	NIGHT
08-11-2016	56.2	57.5
23-11-2016	60.9	50.2
06-12-2016	60.3	58.5
21-12-2016	67.9	51.4
09-01-2017	60.3	56.7
23-01-2017	58.5	55.9
08-02-2017	59.4	57.3
23-02-2017	57.9	55.2
08-03-2017	58.5	57.3
23-03-2017	58.5	57.5
Brief Statistic	**Day**	**Night**
Minimum	56.20	50.20
Maximum	67.90	58.50
Mean	59.84	55.75
Noise Standard	**75**	**70**

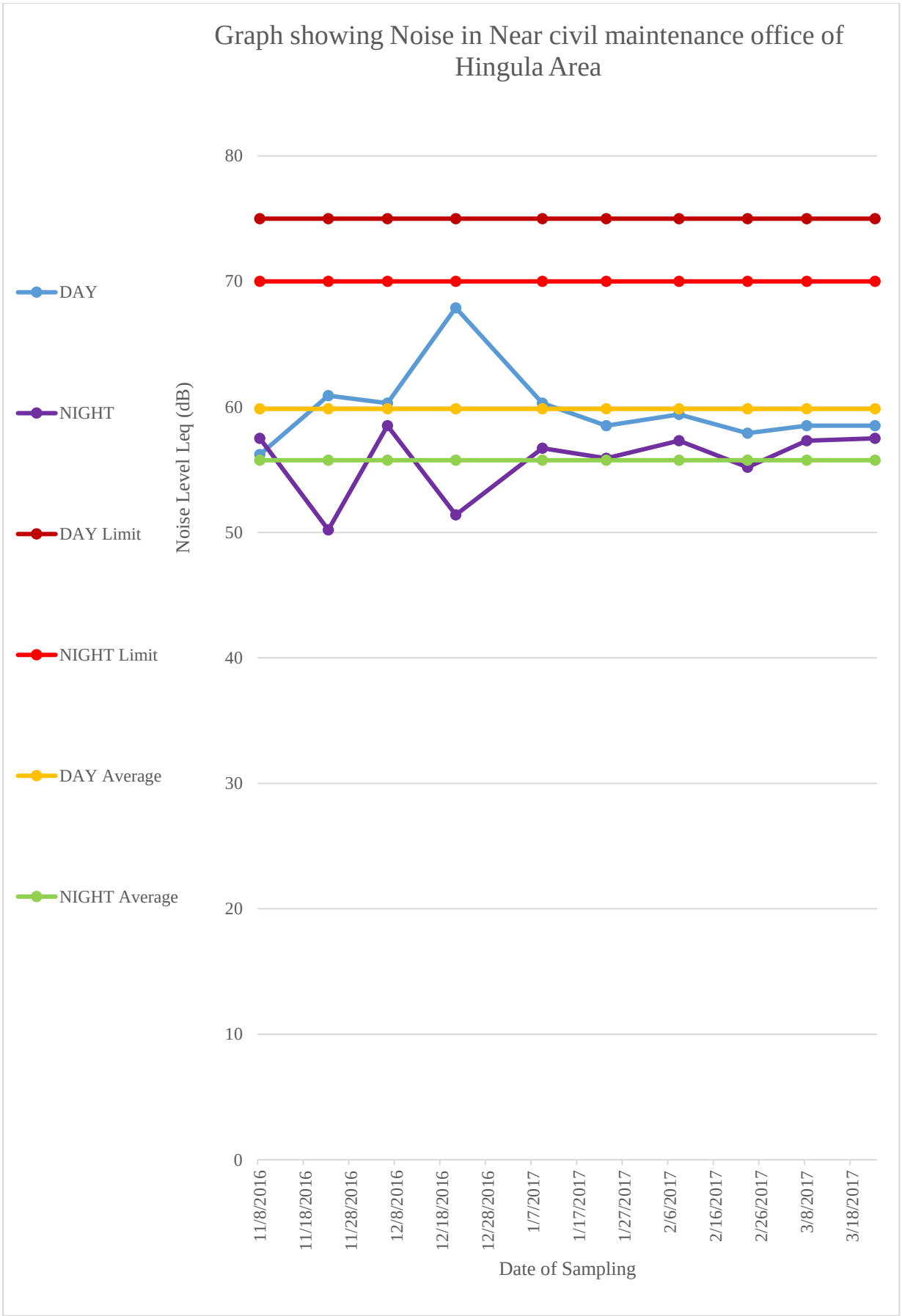

Graph showing Noise in Near civil maintenance office of Hingula Area
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling

Table:56
Project: Bharatpur OCP
Monitoring Station: Near civil maintenance office of Kalinga Colony/PF

DATE OF SAMPLING	DAY	NIGHT
10-06-2016	60.9	57.6
27-06-2016	57.2	55.8
06-07-2016	59.6	55.7
21-07-2016	60.7	55
09-08-2016	60.2	56.7
22-08-2016	57.5	54.6
09-09-2016	59.5	57.1
22-09-2016	59.2	56.2
06-10-2016	58	55.3
20-10-2016	58.3	56.2
Brief Statistic	**Day**	**Night**
Minimum	57.20	54.60
Maximum	60.90	57.60
Mean	59.11	56.02
Noise Standard	**75**	**70**

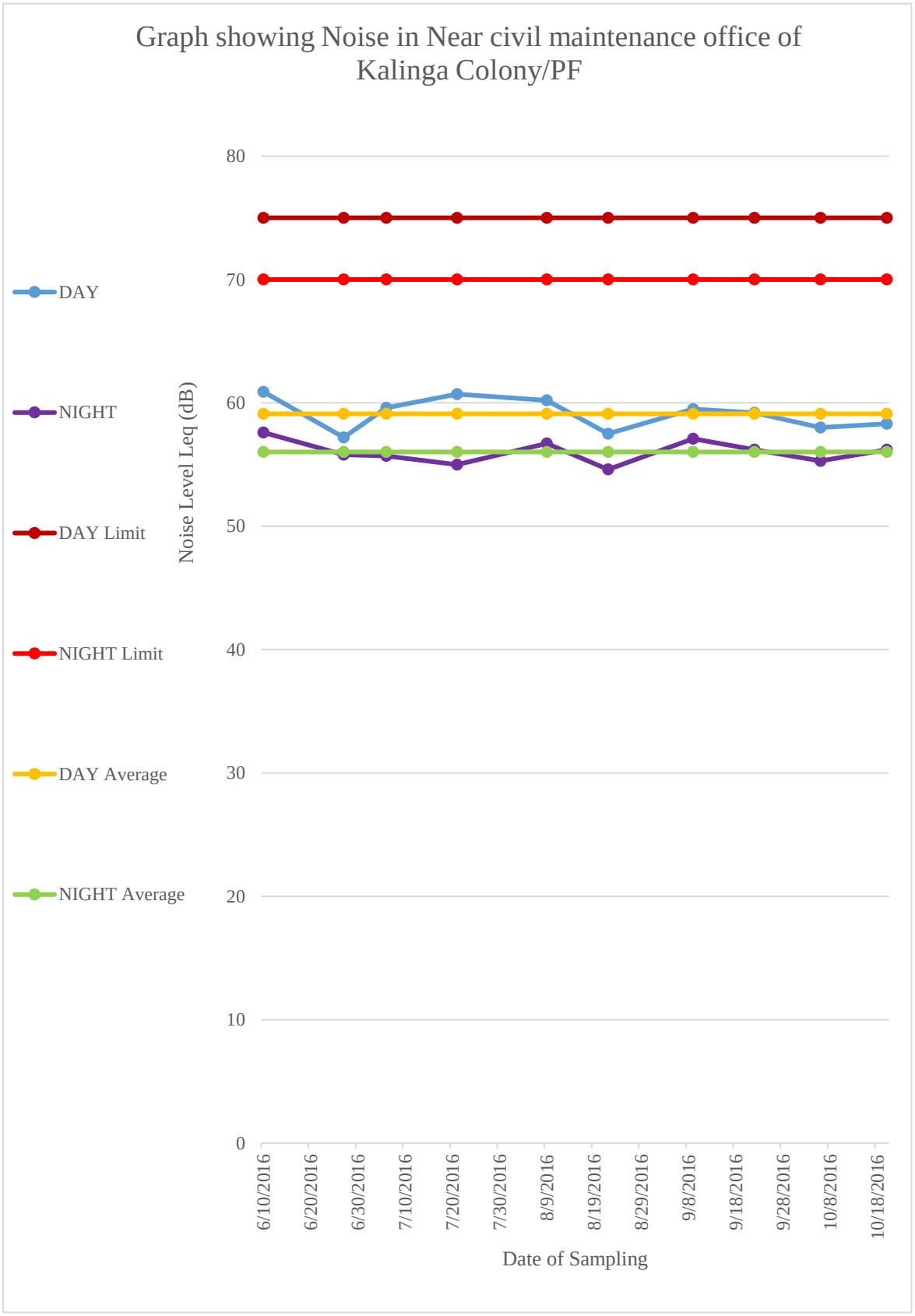

Graph showing Noise in Near civil maintenance office of Kalinga Colony/PF
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/10/2016
6/20/2016
6/30/2016
7/10/2016
7/20/2016
7/30/2016
8/9/2016
8/19/2016
8/29/2016
9/8/2016
9/18/2016
9/28/2016
10/8/2016
10/18/2016
Date of Sampling

Table:57
Project: Bharatpur OCP
Monitoring Station: Near ETP

DATE OF SAMPLING	DAY	NIGHT
09-08-2016	62.5	61.7
22-08-2016	60.8	62
09-09-2016	63.8	63.3
22-09-2016	63.8	62.8
06-10-2016	62.4	63.5
20-10-2016	62.4	
08-11-2016	60.4	60.6
23-11-2016	65.2	62.5
06-12-2016	62.1	63.3
21-12-2016	62.2	66.9
09-01-2017	67.5	63
23-01-2017	62.5	63.2
08-02-2017	63.9	64.1
23-02-2017	60.9	62.3
08-03-2017	62.2	61.6
23-03-2017	62.7	67.5
Brief Statistic	**Day**	**Night**
Minimum	60.40	60.60
Maximum	67.50	67.50
Mean	62.83	63.22
Noise Standard	**75**	**70**

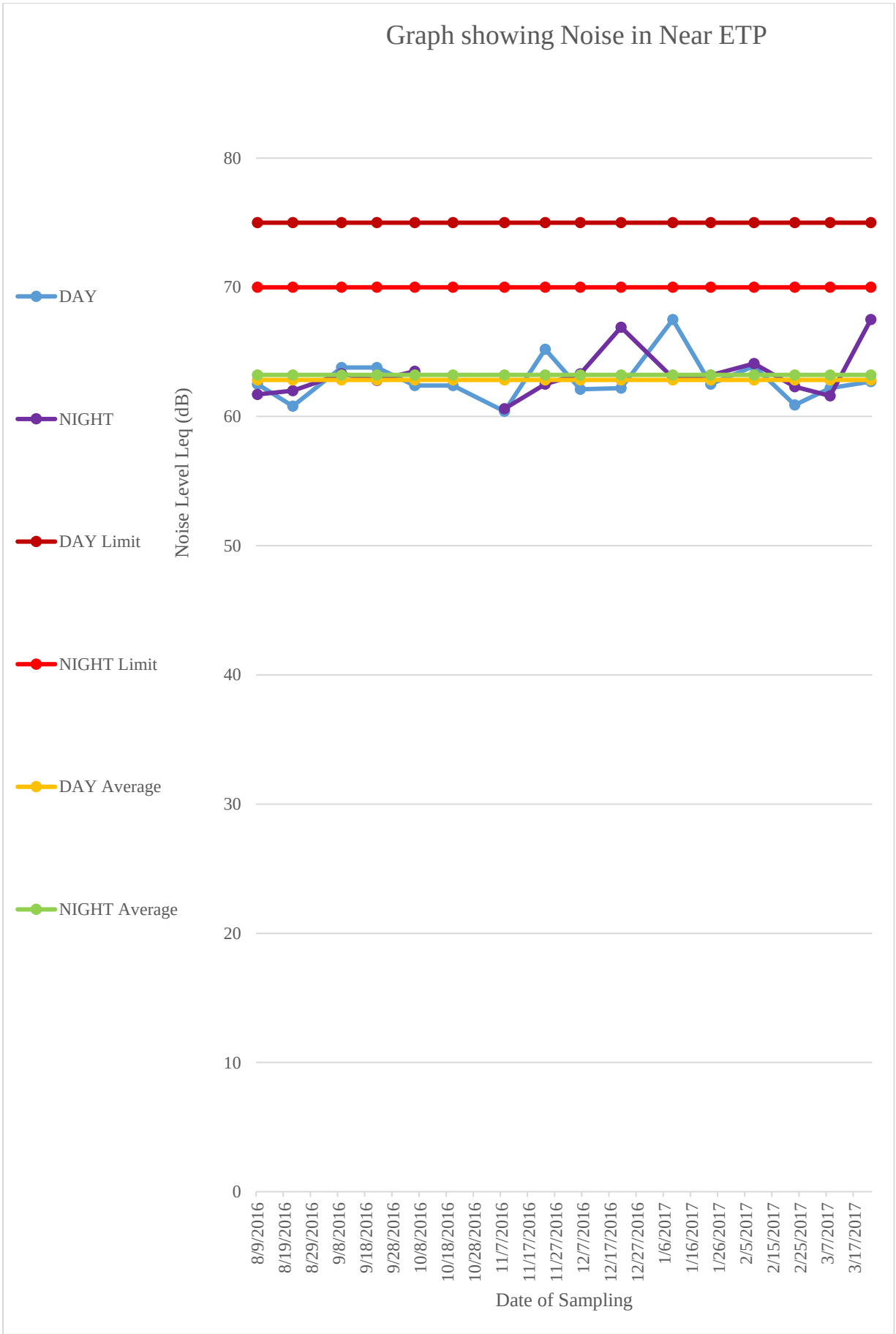

Graph showing Noise in Near ETP
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
8/9/2016
8/19/2016
8/29/2016
9/8/2016
9/18/2016
9/28/2016
10/8/2016
10/18/2016
10/28/2016
11/7/2016
11/17/2016
11/27/2016
12/7/2016
12/17/2016
12/27/2016
1/6/2017
1/16/2017
1/26/2017
2/5/2017
2/15/2017
2/25/2017
3/7/2017
3/17/2017
Date of Sampling

Table:58
Project: Bharatpur OCP
Monitoring Station: On backfill near reject dump yard

DATE OF SAMPLING	DAY	NIGHT
10-06-2016	66.1	65.3
27-06-2016	65.6	64.2
06-07-2016	63.7	62.8
21-07-2016	65.4	65.4
Brief Statistic	**Day**	**Night**
Minimum	**63.70**	**62.80**
Maximum	**66.10**	**65.40**
Mean	**65.20**	**64.43**
Noise Standard	**75**	**70**

Table:59
Project: Bharatpur OCP
Monitoring Station: Padmabatipur Village

DATE OF SAMPLING	DAY	NIGHT
10-06-2016	61.2	59.2
27-06-2016	58.1	57.2
06-07-2016	61	60.8
21-07-2016	53.4	60.6
Brief Statistic	**Day**	**Night**
Minimum	**53.40**	**57.20**
Maximum	**61.20**	**60.80**
Mean	**58.43**	**59.45**
Noise Standard	**75**	**70**

Table:60
Project: Chhendipada OCP
Monitoring Station: Near Mine Working

DATE OF SAMPLING	DAY	NIGHT
01-06-2016	55.6	58.3
16-06-2016	58.9	55.7
01-07-2016	59.1	56
18-07-2016	57.9	52.7
04-08-2016	54.7	53.7
17-08-2016	58.2	56.7
06-09-2016	56.2	54.5
19-09-2016	55.9	55.2
03-10-2016	56.2	54.5
17-10-2016	57.1	55.4
02-11-2016	55.8	56.6
17-11-2016	61.1	59.8
02-12-2016	60.4	60.6
19-12-2016	60.5	57.7
02-01-2017	57.7	58.4
16-01-2017	56.7	56.7
03-02-2017	57	55.9
20-02-2017	56.4	51.4
03-03-2017	56.8	52.6
20-03-2017	56.8	52
Brief Statistic	**Day**	**Night**
Minimum	**54.70**	**51.40**
Maximum	**61.10**	**60.60**
Mean	**57.45**	**55.72**
Noise Standard	**75**	**70**

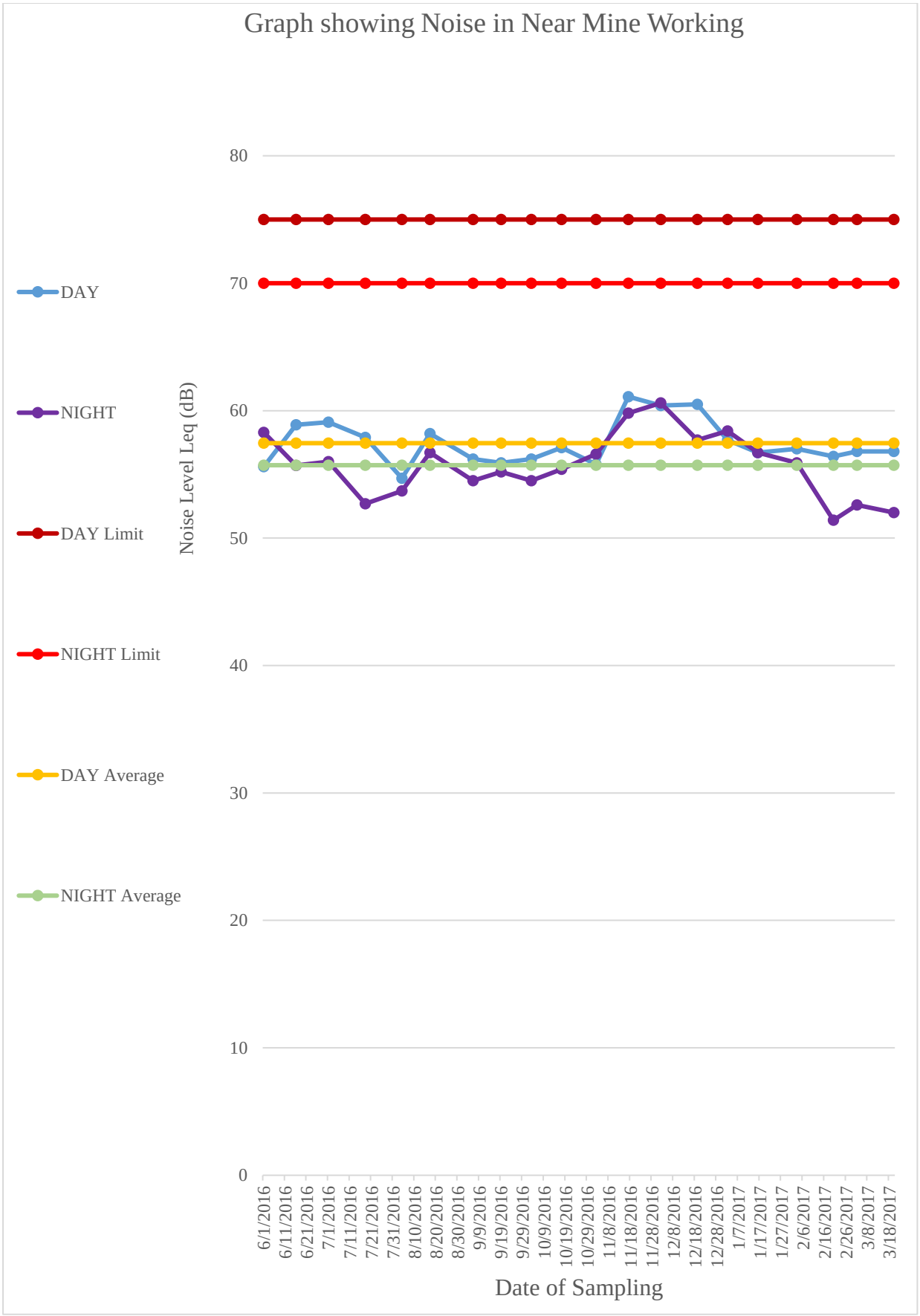

Graph showing Noise in Near Mine Working
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling

Table:61
Project: Chhendipada OCP
Monitoring Station: Near Site Office

DATE OF SAMPLING	DAY	NIGHT
01-06-2016	59.9	58
16-06-2016	58.6	57.3
01-07-2016	62.7	57.3
18-07-2016	58.4	58.2
04-08-2016	55.5	56.5
17-08-2016	59	57
06-09-2016	58.9	56.4
19-09-2016	58.6	55.4
03-10-2016	58.6	56.3
17-10-2016	58.6	57.3
02-11-2016	61.3	56.1
17-11-2016	59	58.1
02-12-2016	60.1	59.9
19-12-2016	58.6	56.5
02-01-2017	58.9	56.9
16-01-2017	57.2	56.3
03-02-2017	59.7	54.1
20-02-2017	58.4	53.3
03-03-2017	55.1	53.3
20-03-2017	58.6	49.6
Brief Statistic	**Day**	**Night**
Minimum	**55.10**	**49.60**
Maximum	**62.70**	**59.90**
Mean	**58.79**	**56.19**
Noise Standard	**75**	**70**

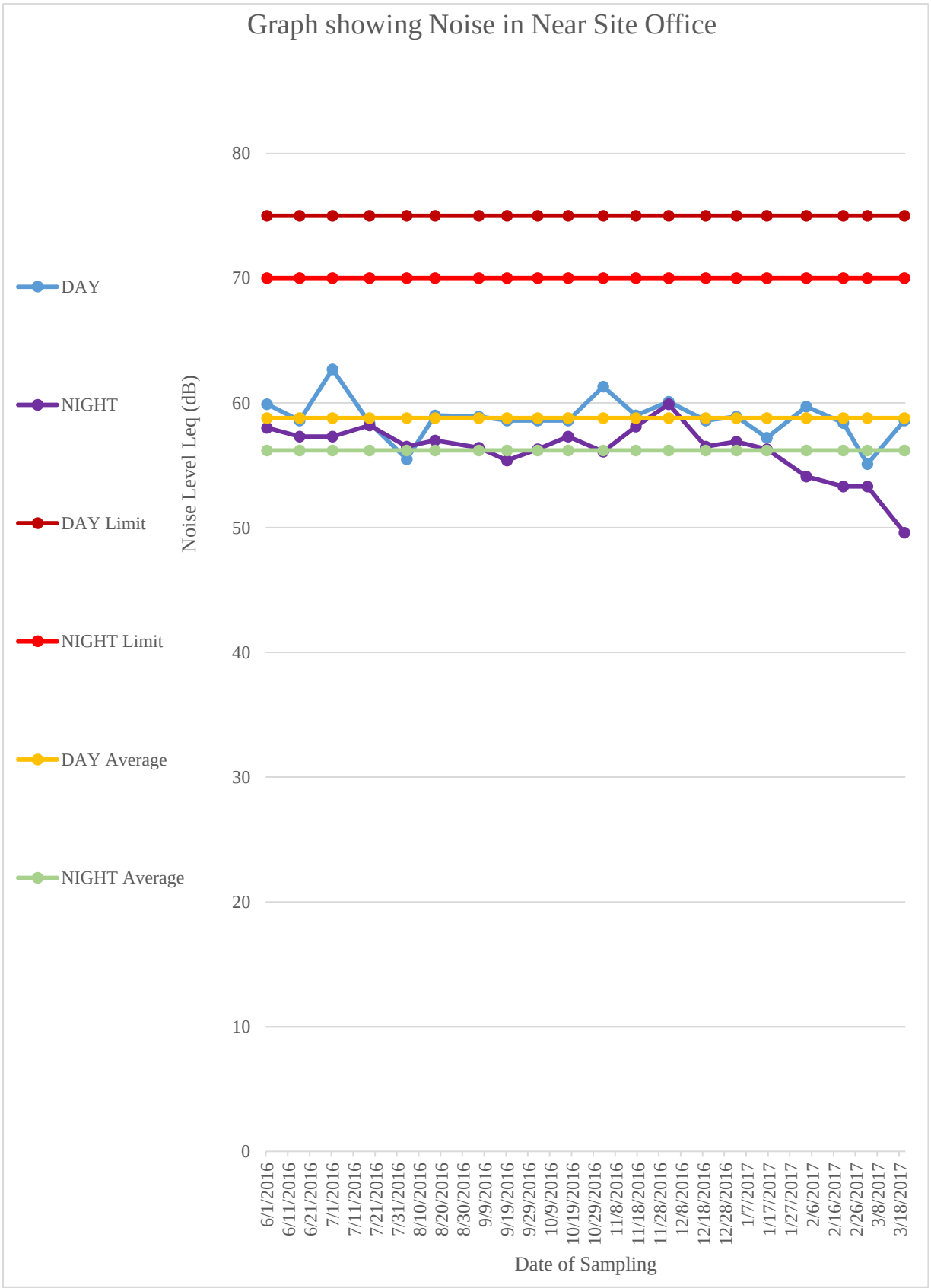

Graph showing Noise in Near Site Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling

Table:62
Project: Chhendipada OCP
Monitoring Station: Near Weigh Bridge

DATE OF SAMPLING	DAY	NIGHT
01-06-2016	59.6	59.4
16-06-2016	60.3	57.1
01-07-2016	61.6	59.8
18-07-2016	60.1	55.7
04-08-2016	59.6	55.5
17-08-2016	60.4	59.1
06-09-2016	59.9	58.3
19-09-2016	59.2	57.6
03-10-2016	58.9	58
17-10-2016	59.8	57.8
02-11-2016	59.3	57.6
17-11-2016	67.3	61.6
02-12-2016	61.7	59.4
19-12-2016	63.2	58.1
02-01-2017	61.9	60
16-01-2017	60.3	58.3
03-02-2017	58.4	59.1
20-02-2017	60.8	55
03-03-2017	60.8	55.2
20-03-2017	59.1	59.5
Brief Statistic	**Day**	**Night**
Minimum	**58.40**	**55.00**
Maximum	**67.30**	**61.60**
Mean	**60.61**	**58.11**
Noise Standard	**75**	**70**

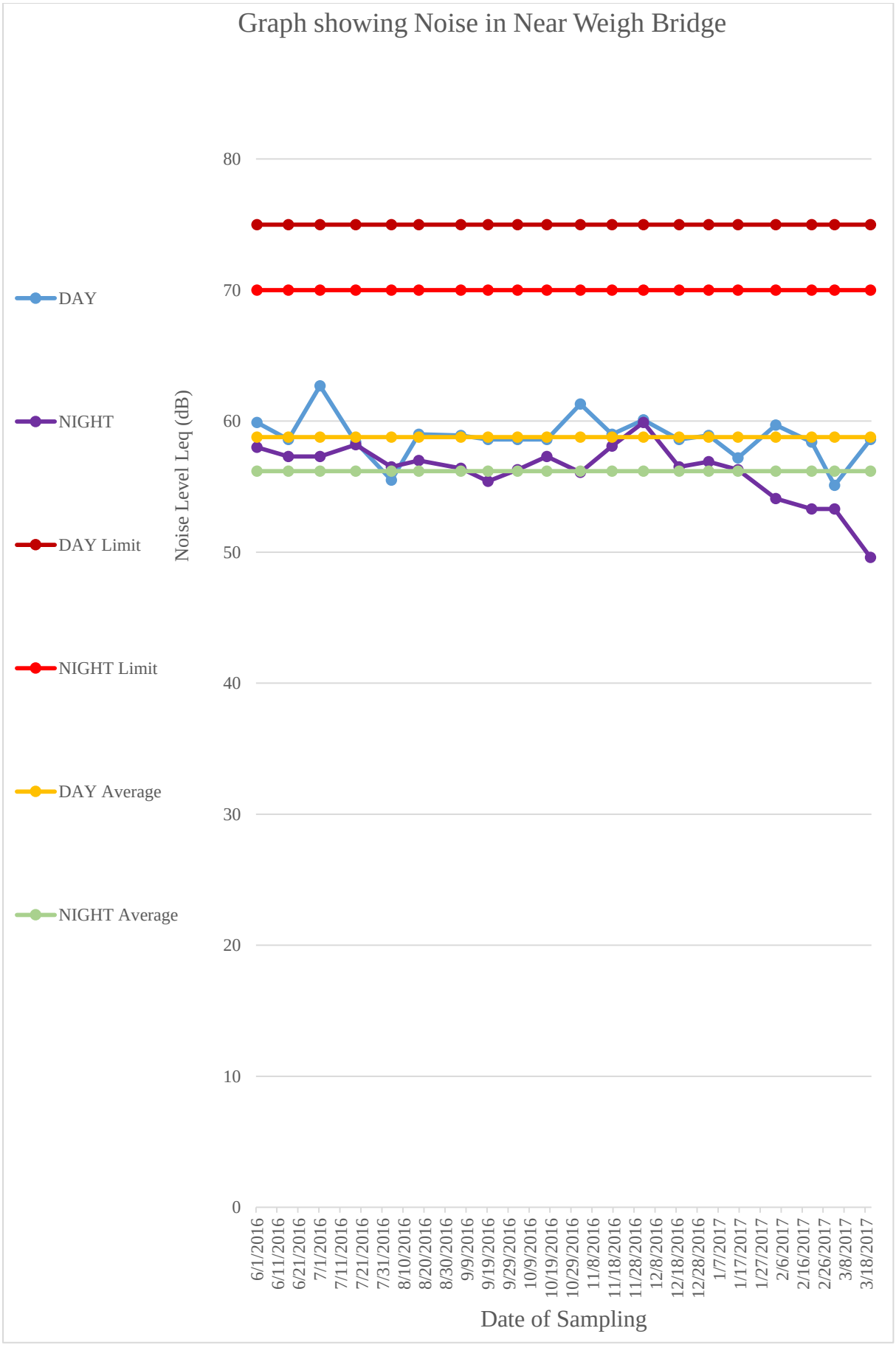

Graph showing Noise in Near Weigh Bridge
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/1/2016
6/11/2016
6/21/2016
7/1/2016
7/11/2016
7/21/2016
7/31/2016
8/10/2016
8/20/2016
8/30/2016
9/9/2016
9/19/2016
9/29/2016
10/9/2016
10/19/2016
10/29/2016
11/8/2016
11/18/2016
11/28/2016
12/8/2016
12/18/2016
12/28/2016
1/7/2017
1/17/2017
1/27/2017
2/6/2017
2/16/2017
2/26/2017
3/8/2017
3/18/2017
Date of Sampling

Table:63
Project: Kaniha OCP
Monitoring Station: Telisingha Village

DATE OF SAMPLING	DAY	NIGHT
06-06-2016	65.2	57.9
21-06-2016	61.5	58
11-07-2016	61	59.1
26-07-2016	62.4	59.3
10-08-2016	61	58.9
23-08-2016	61.7	57.2
12-09-2016	60.1	58.7
26-09-2016	60.7	58.2
07-10-2016	58.6	56.2
21-10-2016	60.8	57.9
07-11-2016	60.4	61.9
22-11-2016	60.1	57.5
05-12-2016	60.5	57.7
20-12-2016	60.9	59.7
03-01-2017	56.4	57
17-01-2017	58.8	59.3
02-02-2017	60.7	59
17-02-2017	61.8	59.7
02-03-2017	60.7	59.4
17-03-2017	54.7	59.1
Brief Statistic	**Day**	**Night**
Minimum	**54.70**	**56.20**
Maximum	**65.20**	**61.90**
Mean	**60.40**	**58.59**
Noise Standard	**75**	**70**

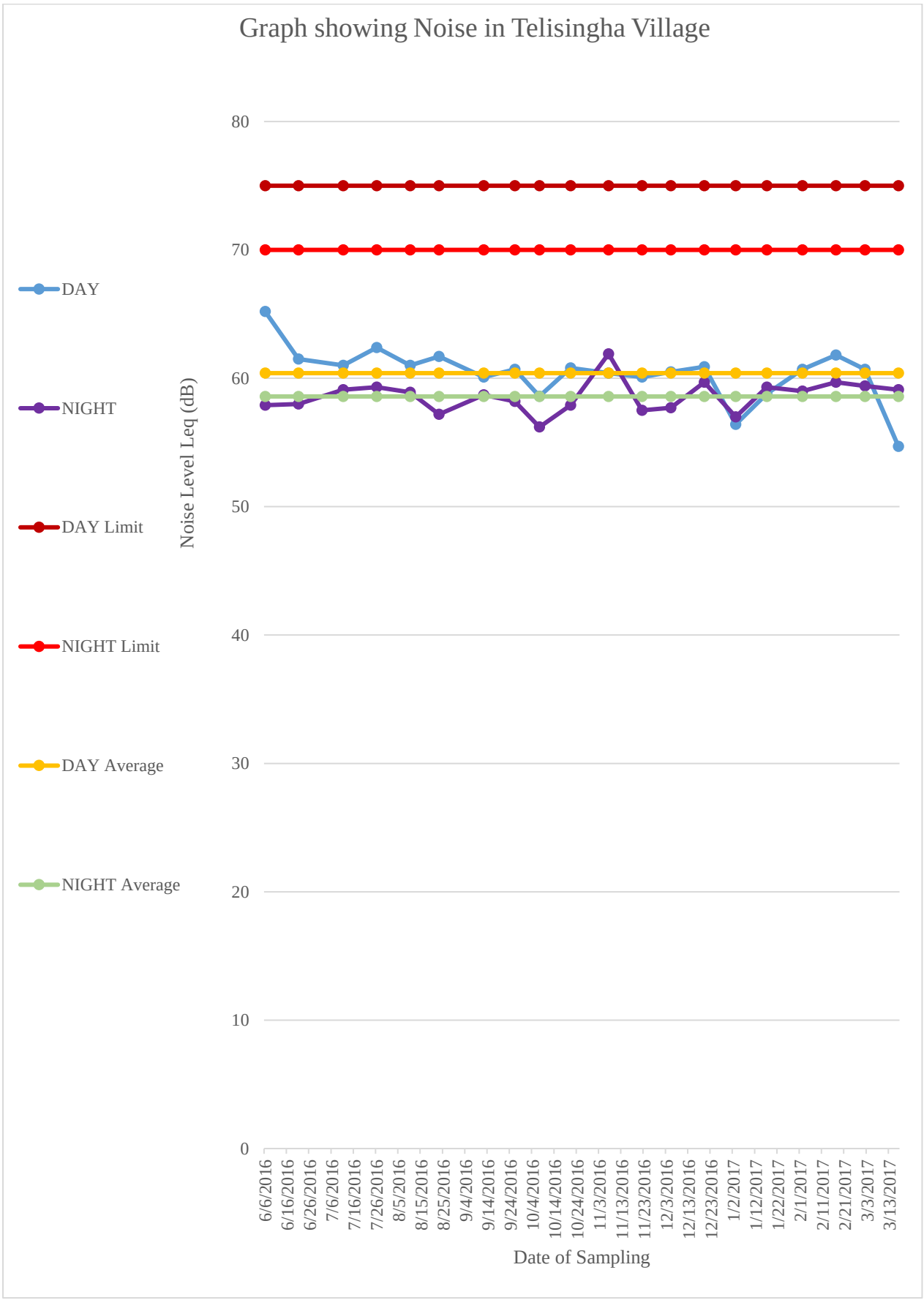

Graph showing Noise in Telisingha Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

Table:64
Project: Kaniha OCP
Monitoring Station: Site Office

DATE OF SAMPLING	DAY	NIGHT
06-06-2016	59.4	56.8
21-06-2016	59.1	59.1
11-07-2016	59.4	57.2
26-07-2016	60.9	58.7
10-08-2016	59.7	57.1
23-08-2016	59.4	58.1
12-09-2016	58.7	56.2
26-09-2016	60.8	59.4
07-10-2016	58.9	57
21-10-2016	59.6	58.3
07-11-2016	61.3	58.6
22-11-2016	62.3	60.6
05-12-2016	60.9	59.2
20-12-2016	62.8	58.7
03-01-2017	59.8	56.1
17-01-2017	56.8	59.2
02-02-2017	61.8	56.6
17-02-2017	58.8	58.9
02-03-2017	61.8	59.5
17-03-2017	61.5	61.2
Brief Statistic	**Day**	**Night**
Minimum	56.80	56.10
Maximum	62.80	61.20
Mean	60.19	58.33
Noise Standard	**75**	**70**

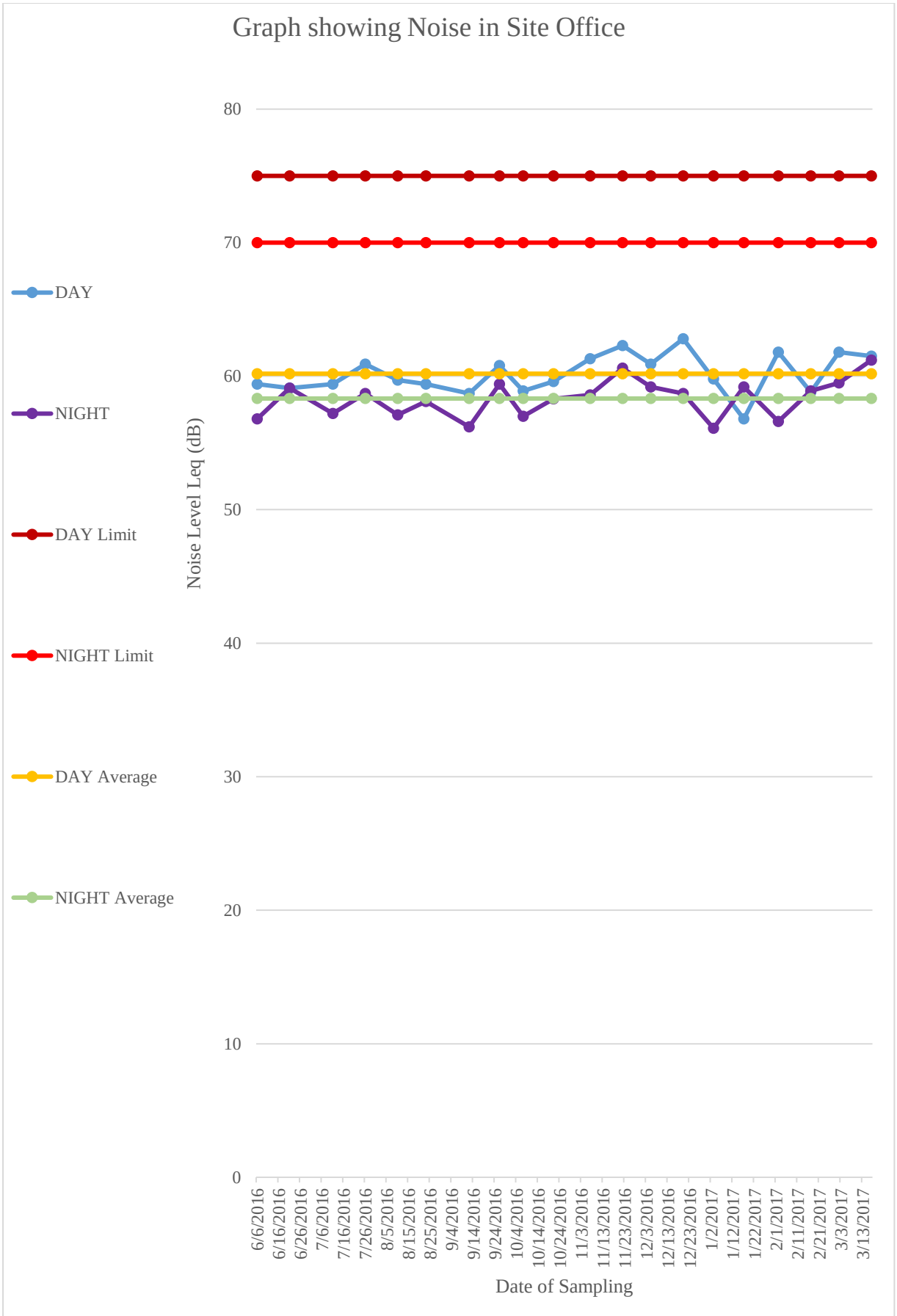

Graph showing Noise in Site Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

Table: 65

Project: Kaniha OCP

Monitoring Station: Patharmunda Village

DATE OF SAMPLING	DAY	NIGHT
06-06-2016	60.3	55
21-06-2016	63.9	61
11-07-2016	58.6	59
26-07-2016	61.2	58.7
10-08-2016	60.6	58.5
23-08-2016	61.2	58.4
12-09-2016	59.8	58.1
26-09-2016	61.4	58.4
07-10-2016	59.3	58.6
21-10-2016	61.2	59.6
07-11-2016	61.5	60.3
22-11-2016	62	59
05-12-2016	58.7	58.6
20-12-2016	62.4	56.2
03-01-2017	58.6	55.5
17-01-2017	60.2	60.5
02-02-2017	61.6	56
17-02-2017	61.6	59.6
02-03-2017	60	56.6
17-03-2017	59.1	56
Brief Statistic	**Day**	**Night**
Minimum	**58.60**	**55.00**
Maximum	**63.90**	**61.00**
Mean	**60.66**	**58.18**
Noise Standard	**75**	**70**

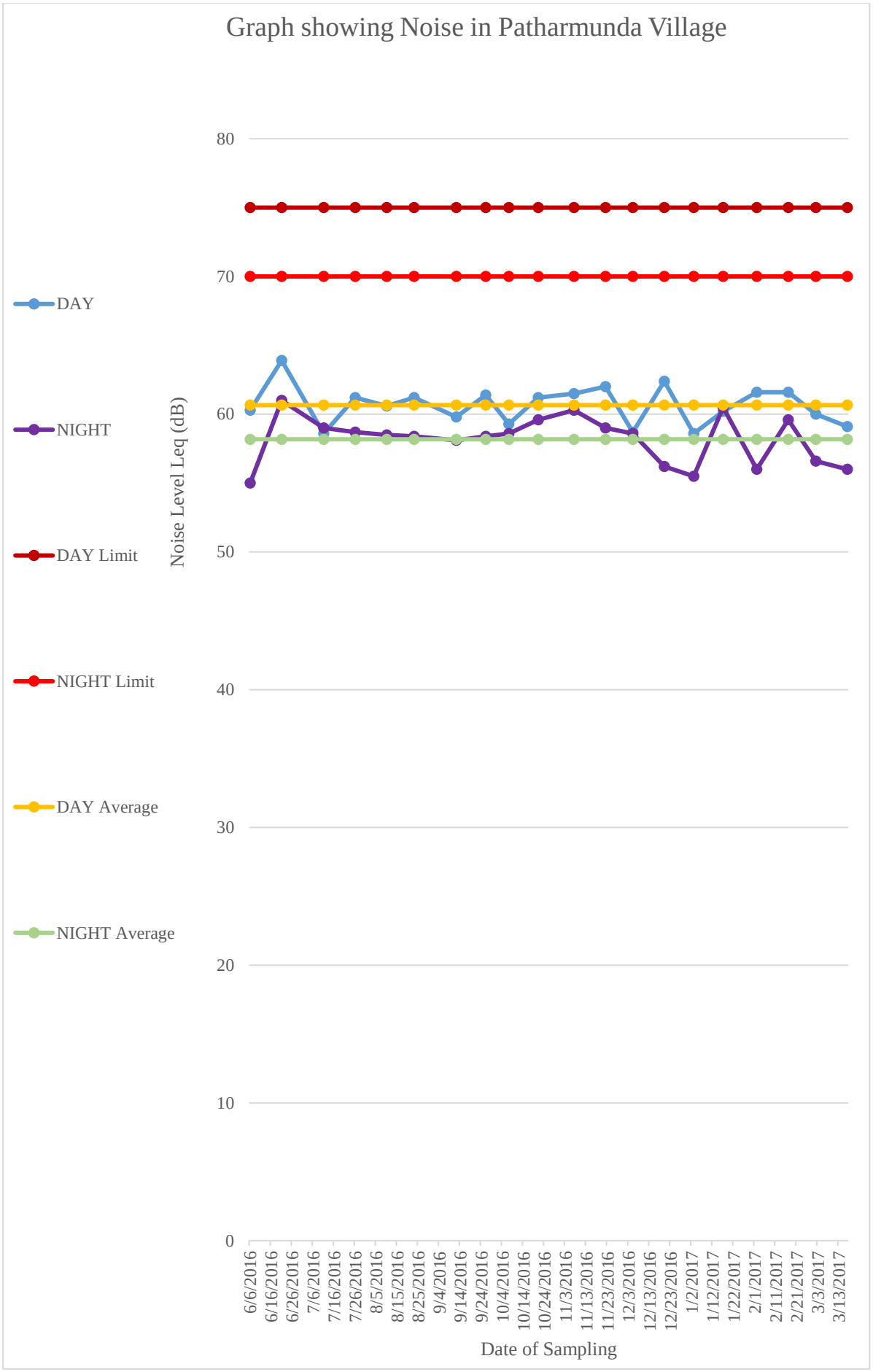

Graph showing Noise in Patharmunda Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/6/2016
6/16/2016
6/26/2016
7/6/2016
7/16/2016
7/26/2016
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

Table: 66

Project: Kaniha OCP

Monitoring Station: Near Jarda village

DATE OF SAMPLING	DAY	NIGHT
06-06-2016	59.8	56.6
21-06-2016	60.9	58.6
11-07-2016	58.4	55.8
26-07-2016	60.7	58.1
10-08-2016	58.3	56.6
23-08-2016	59.6	56.1
12-09-2016	58.2	55.6
26-09-2016	58.5	56.8
07-10-2016	57.4	54.8
21-10-2016	56.5	55.2
07-11-2016	59.7	58.7
22-11-2016	61.4	57.9
05-12-2016	58.1	57.1
20-12-2016	58	59.5
03-01-2017	59.3	53.4
17-01-2017	55.9	56.8
02-02-2017	57.4	55.6
17-02-2017	56.9	56.7
02-03-2017	59.3	55.4
17-03-2017	59	56.6
Brief Statistic	**Day**	**Night**
Minimum	**55.90**	**53.40**
Maximum	**61.40**	**59.50**
Mean	**58.67**	**56.60**
Noise Standard	**75**	**70**

Table:67
Project: Lingaraj OCP
Monitoring Station: Near Langijoda Village

DATE OF SAMPLING	DAY	NIGHT
13-06-2016	60.2	59.6
28-06-2016	58.1	56.8
13-07-2016	59.8	59.3
28-07-2016	61.9	58.1
05-08-2016	60.2	58.2
18-08-2016	60.5	58.8
07-09-2016	60.3	58.3
20-09-2016	60.3	58.1
14-10-2016	58.4	57.3
27-10-2016	59	58.6
14-11-2016	60.5	62.7
28-11-2016	60.5	59.1
13-12-2016	59.9	55.4
29-12-2016	63.5	60.8
12-01-2017	59.1	57.6
27-01-2017	60.8	57.5
13-02-2017	58.9	55.9
27-02-2017	61.3	61.4
14-03-2017	58	58
29-03-2017	56.9	57
Brief Statistic	**Day**	**Night**
Minimum	**56.90**	**55.40**
Maximum	**63.50**	**62.70**
Mean	**59.91**	**58.43**
Noise Standard	**75**	**70**

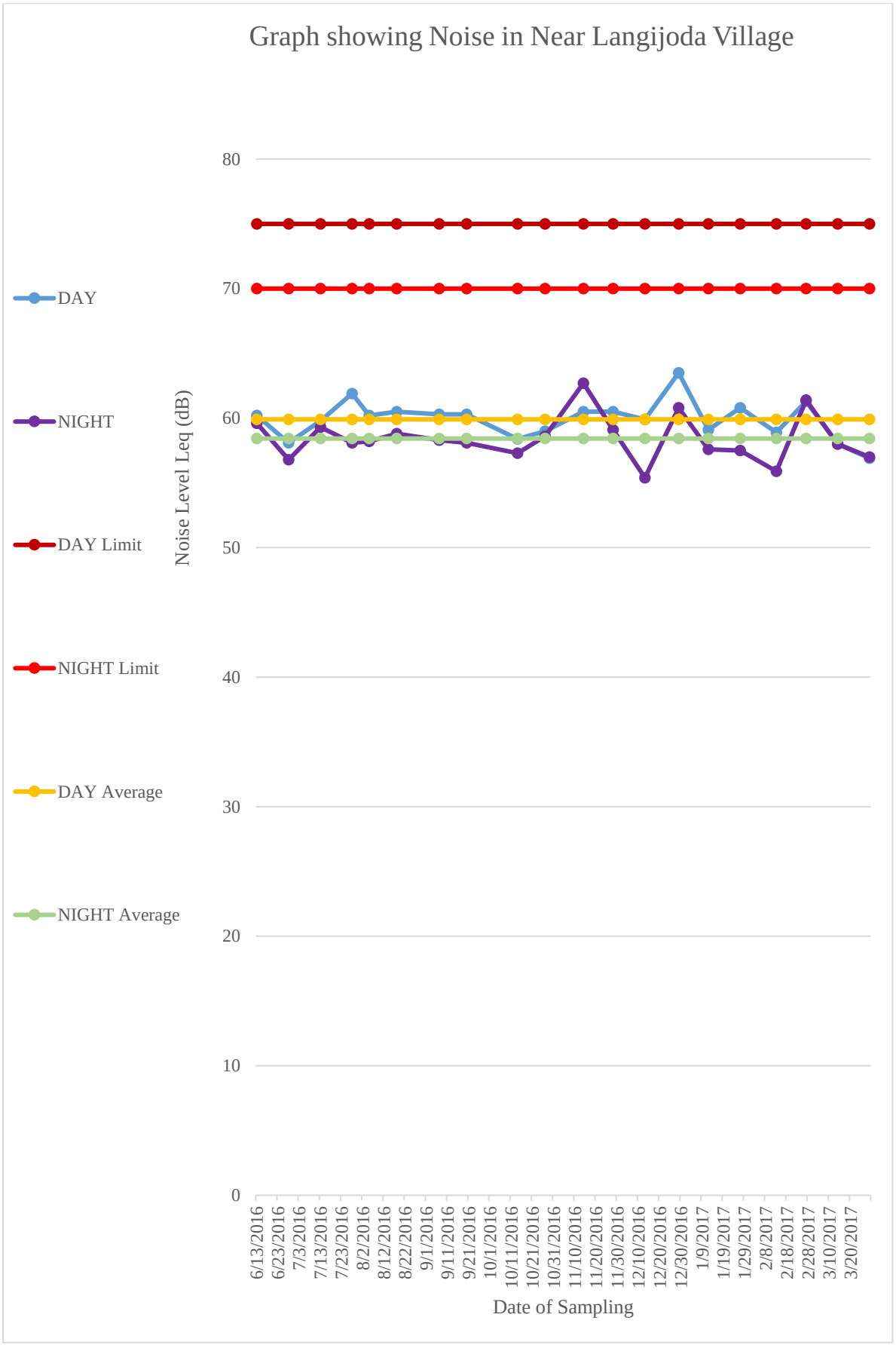

Graph showing Noise in Near Langijoda Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:68
Project: Lingaraj OCP
Monitoring Station: Near CT Road (Lingaraj to Dera)

DATE OF SAMPLING	DAY	NIGHT
13-06-2016	61.4	61.8
28-06-2016	62	60.2
13-07-2016	61.1	62.4
28-07-2016	64.5	61.5
08-08-2016	62.4	62
19-08-2016	62.8	62.2
08-09-2016	63	62.7
21-09-2016	62.8	62
13-10-2016	61.9	60.3
27-10-2016	62.6	62
11-11-2016	60.2	58.4
29-11-2016	62.5	62.3
14-12-2016	60.4	57.1
29-12-2016	60.4	56.6
12-01-2017	64.7	61.7
27-01-2017	61.8	58.9
13-02-2017	58.6	58.1
25-02-2017	59.3	63.3
14-03-2017	60.4	59.1
29-03-2017	58.1	59.4
Brief Statistic	**Day**	**Night**
Minimum	58.10	56.60
Maximum	64.70	63.30
Mean	61.55	60.60
Noise Standard	**75**	**70**

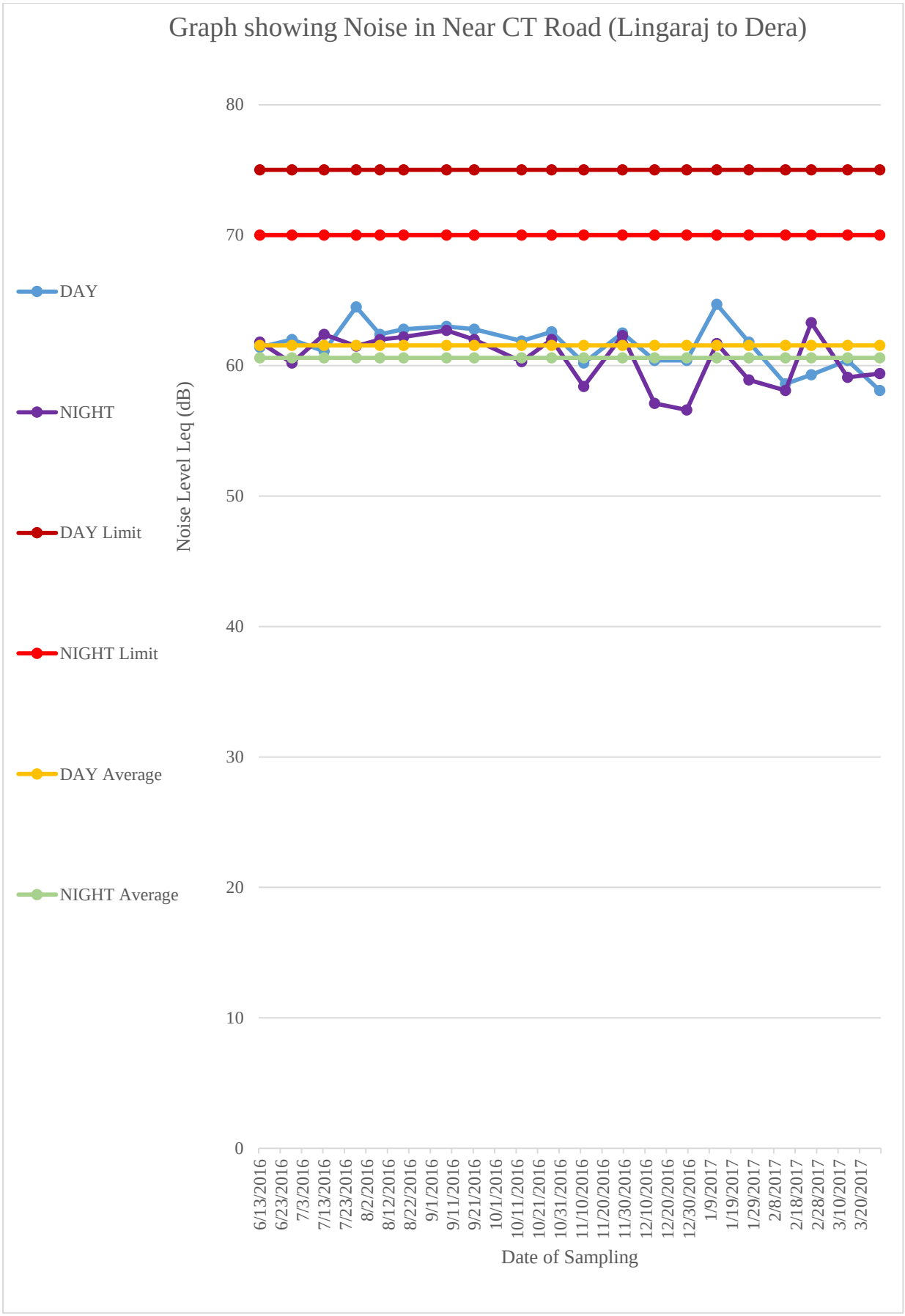

Graph showing Noise in Near CT Road (Lingaraj to Dera)
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:69
Project: Lingaraj OCP
Monitoring Station: Near Shiva Temple

DATE OF SAMPLING	DAY	NIGHT
13-06-2016	62.3	62
28-06-2016	60.9	60.5
13-07-2016	64.8	62.7
28-07-2016	64.6	63
08-08-2016	64.4	62.5
19-08-2016	65.2	64.3
08-09-2016	64.1	63.9
21-09-2016	63.6	63.1
13-10-2016	62.7	62
27-10-2016	63.8	63.2
11-11-2016	66.9	62.5
29-11-2016	63.3	62.4
14-12-2016	61.7	58.3
29-12-2016	64.7	58.8
12-01-2017	61.8	62
27-01-2017	60.1	55.9
13-02-2017	60.8	60.3
25-02-2017	57.7	60
14-03-2017	61.7	60.1
29-03-2017	63	58.7
Brief Statistic	**Day**	**Night**
Minimum	**57.70**	**55.90**
Maximum	**66.90**	**64.30**
Mean	**62.91**	**61.31**
Noise Standard	**75**	**70**

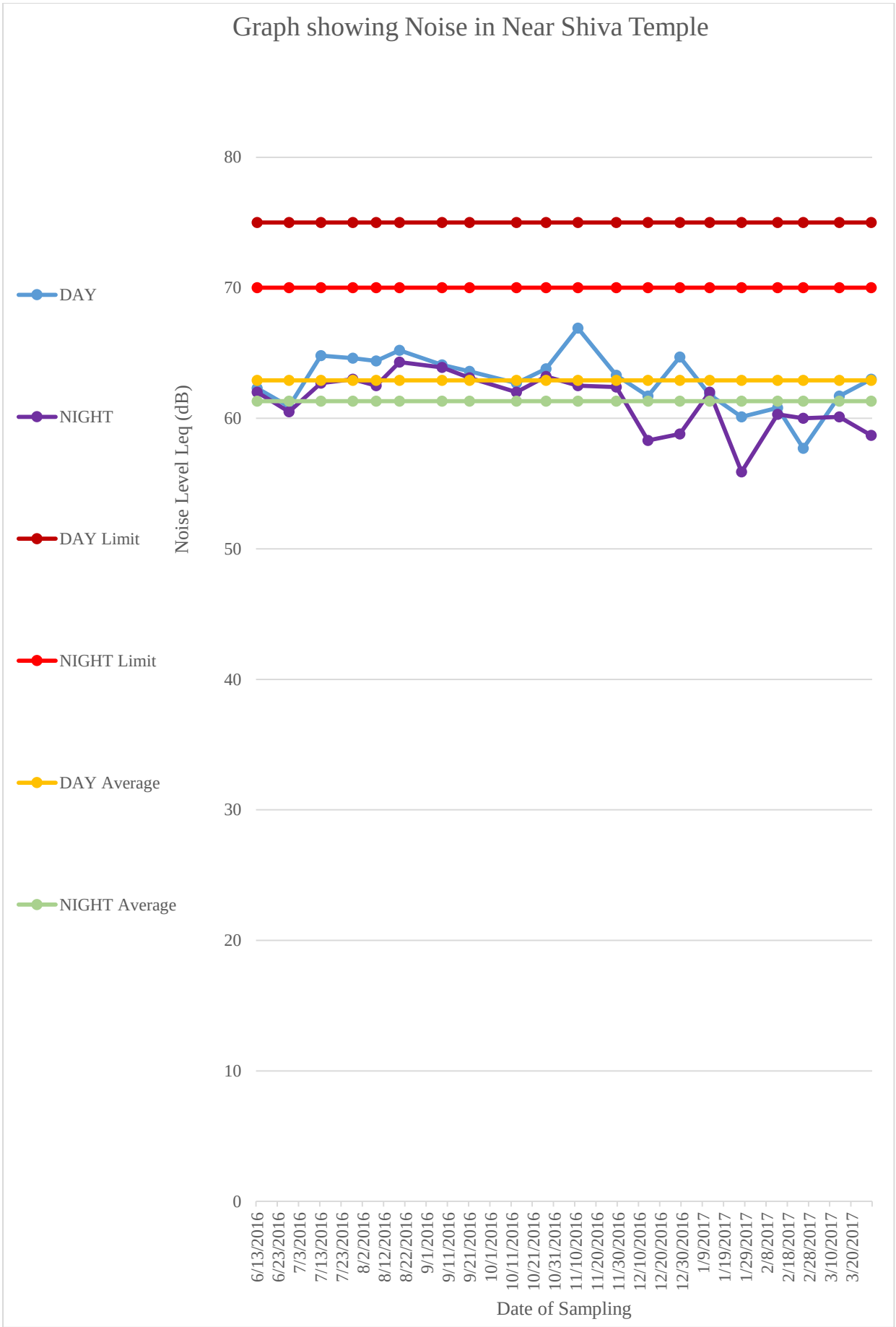

Graph showing Noise in Near Shiva Temple
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:70
Project: Lingaraj OCP
Monitoring Station: Lingaraj CGM Office

DATE OF SAMPLING	DAY	NIGHT
13-06-2016	64.7	60.8
28-06-2016	59.2	58.1
13-07-2016	64	60
28-07-2016	65.2	61.3
05-08-2016	63.7	62.4
18-08-2016	63.1	62.6
07-09-2016	64.2	61.7
20-09-2016	63.2	60.4
14-10-2016	61.8	60.2
27-10-2016	63.8	61.3
14-11-2016	67.6	59.6
28-11-2016	64.3	62.6
13-12-2016	65.9	63.4
29-12-2016	66.1	62.2
12-01-2017	63.9	61
27-01-2017	64.4	60.7
13-02-2017	62.3	63.8
27-02-2017	63.8	62.4
14-03-2017	63.2	62.9
29-03-2017	66.4	61.1
Brief Statistic	**Day**	**Night**
Minimum	**59.20**	**58.10**
Maximum	**67.60**	**63.80**
Mean	**64.04**	**61.43**
Noise Standard	**75**	**70**

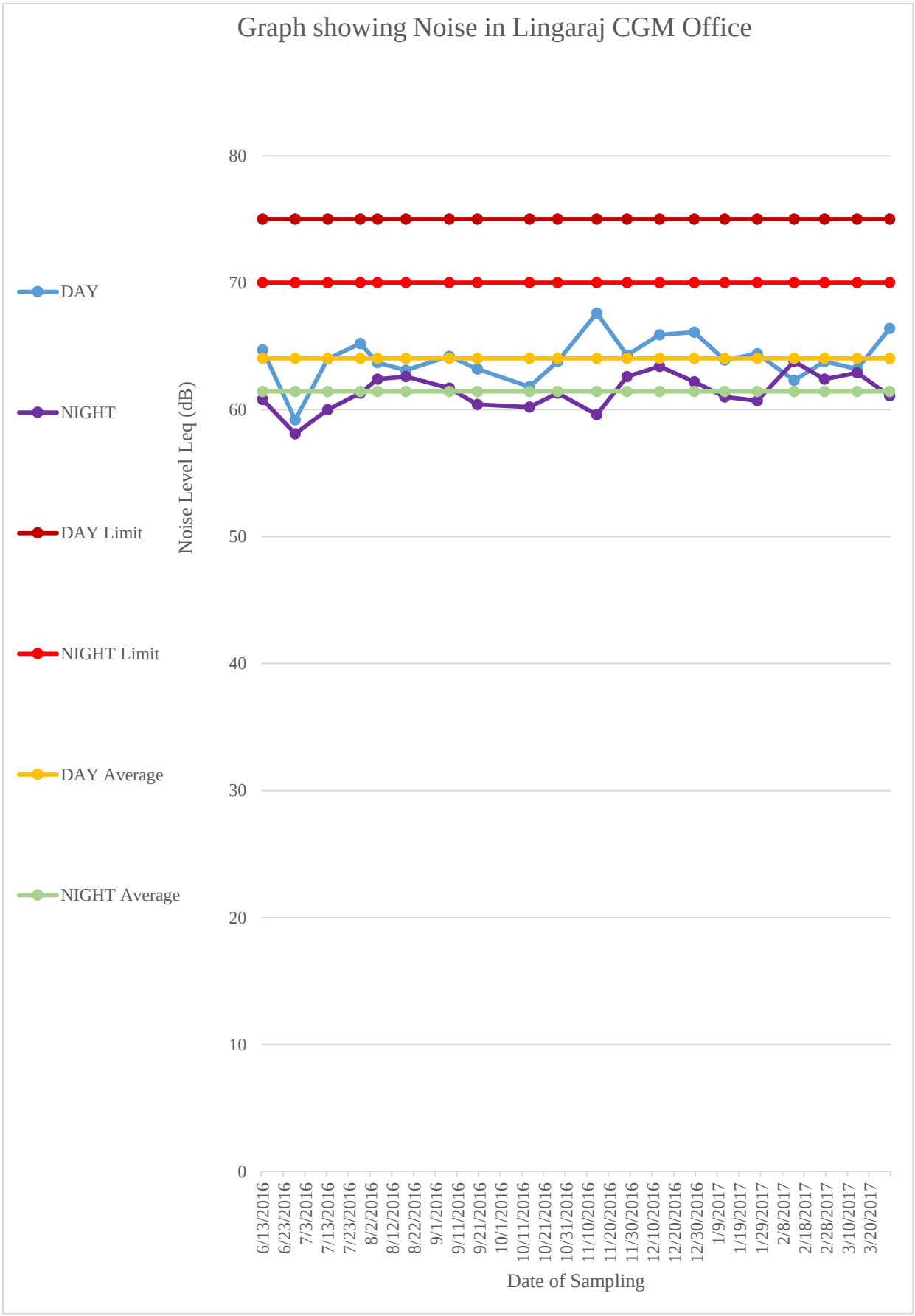

Graph showing Noise in Lingaraj CGM Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:71
Project: Balaram OCP
Monitoring Station: On backfilled area near dozer shed

DATE OF SAMPLING	DAY	NIGHT
03-06-2016	62.10	60.40
20-06-2016	67.20	63.00
05-07-2016	65.00	61.90
20-07-2016	65.00	61.50
08-08-2016	66.10	64.20
19-08-2016	64.80	63.60
08-09-2016	63.60	64.20
21-09-2016	64.20	62.80
05-10-2016	64.30	63.60
19-10-2016	63.40	62.80
04-11-2016	68.00	63.70
21-11-2016	67.60	64.00
08-12-2016	63.30	63.40
23-12-2016	67.10	64.00
05-01-2017	67.20	66.80
19-01-2017	62.60	63.90
07-02-2017	66.40	65.10
22-02-2017	65.00	65.20
07-03-2017	63.90	67.30
22-03-2017	63.90	63.00
Brief Statistic	**Day**	**Night**
Minimum	62.10	60.40
Maximum	68.00	67.30
Mean	65.04	63.72
Noise Standard	**75**	**70**

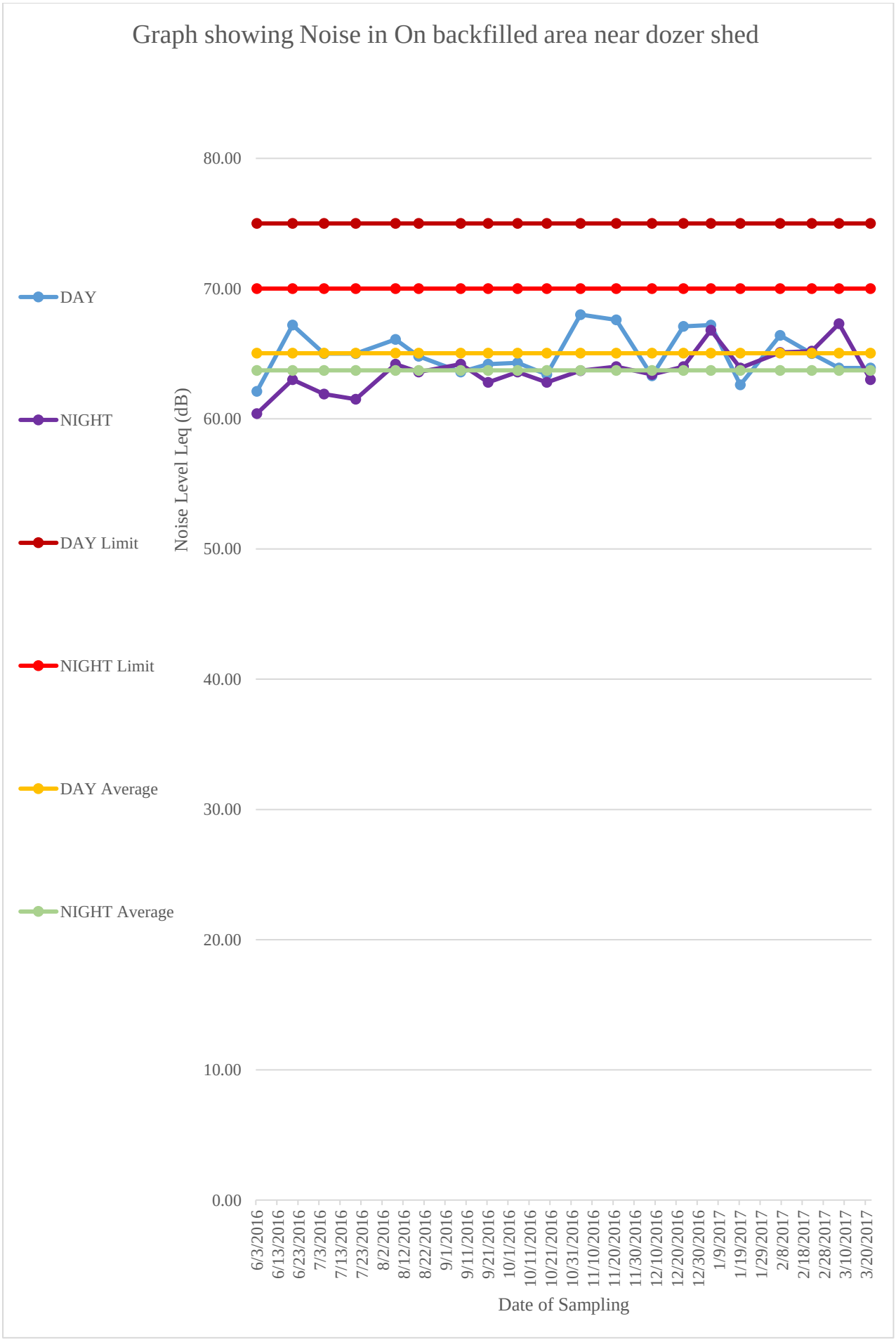

Graph showing Noise in On backfilled area near dozer shed
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:72
Project: Balaram OCP
Monitoring Station: Project Office Balram OCP

DATE OF SAMPLING	DAY	NIGHT
03-06-2016	66.8	64.6
20-06-2016	66.4	62.3
05-07-2016	62	61.7
20-07-2016	61.2	60.3
08-08-2016	63.5	61.8
19-08-2016	63.6	62.4
08-09-2016	63.2	63.3
21-09-2016	63.5	62.3
05-10-2016	63.8	62.8
19-10-2016	62.8	62.5
04-11-2016	60.7	62.8
21-11-2016	65.7	62.1
08-12-2016	61.9	61.7
23-12-2016	63.6	61.6
05-01-2017	63.3	63.2
19-01-2017	65.7	63.5
07-02-2017	64.7	61.3
22-02-2017	62.7	62.1
07-03-2017	64.6	65.6
22-03-2017	64.7	61
Brief Statistic	**Day**	**Night**
Minimum	**60.70**	**60.30**
Maximum	**66.80**	**65.60**
Mean	**63.72**	**62.45**
Noise Standard	**75**	**70**

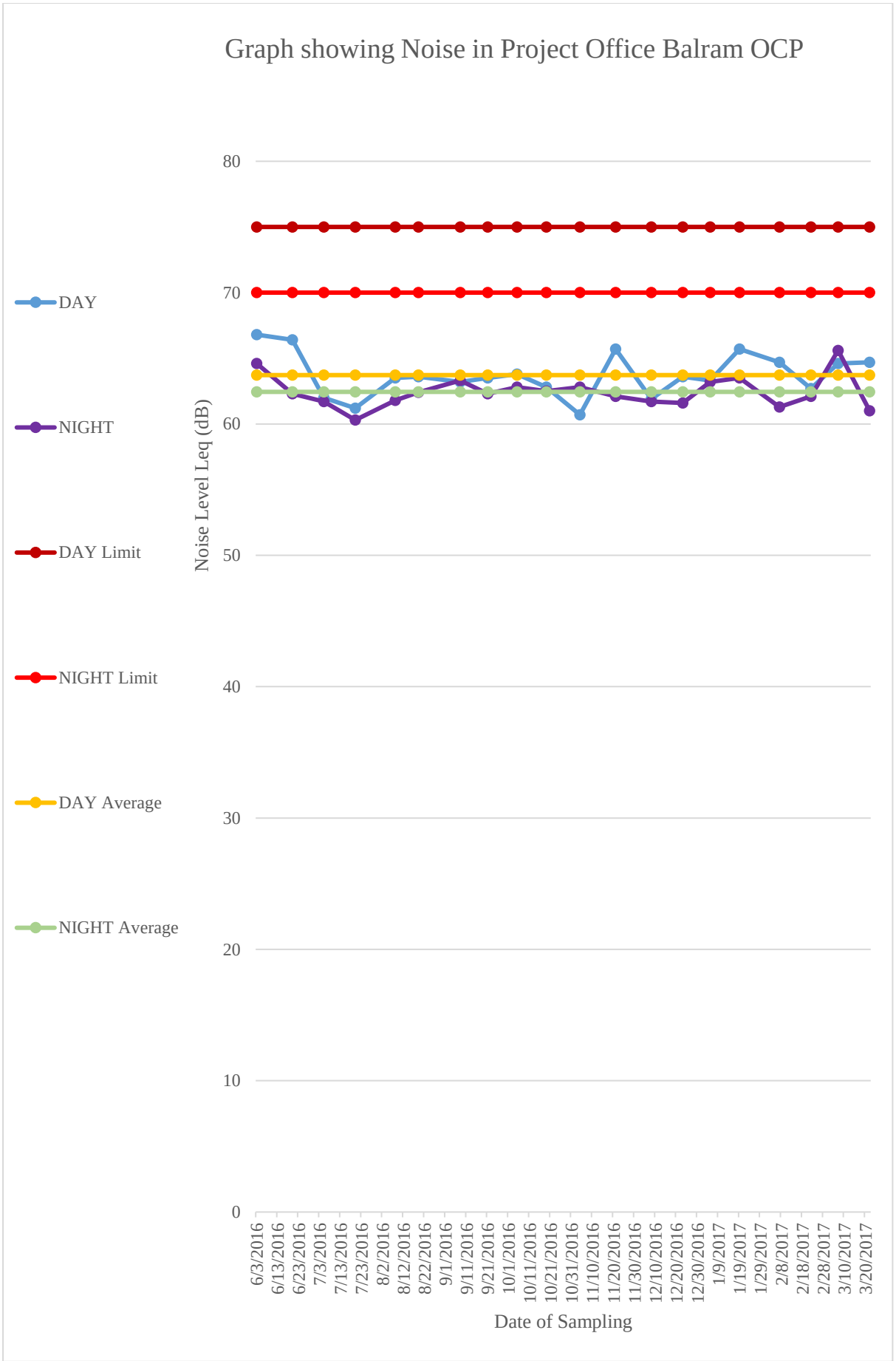

Graph showing Noise in Project Office Balram OCP
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table: 73

Project: Balaram OCP

Monitoring Station: Solada Village

DATE OF SAMPLING	DAY	NIGHT
03-06-2016	58	56.9
20-06-2016	57.4	56.6
05-07-2016	58.8	58.5
20-07-2016	57.5	57.9
08-08-2016	58.9	56.3
19-08-2016	55.7	54.2
08-09-2016	58.5	54.1
21-09-2016	55.2	54.5
05-10-2016	55.6	54.5
19-10-2016	56.5	54.3
04-11-2016	59.4	57.4
21-11-2016	59.8	58.7
08-12-2016	58.2	57.6
23-12-2016	60.3	57.7
05-01-2017	57.3	56.9
19-01-2017	57.4	56.4
07-02-2017	59.4	55.8
22-02-2017	58.3	56.9
07-03-2017	58.5	57.1
22-03-2017	58.6	58.1
Brief Statistic	**Day**	**Night**
Minimum	**55.20**	**54.10**
Maximum	**60.30**	**58.70**
Mean	**57.97**	**56.52**
Noise Standard	**75**	**70**

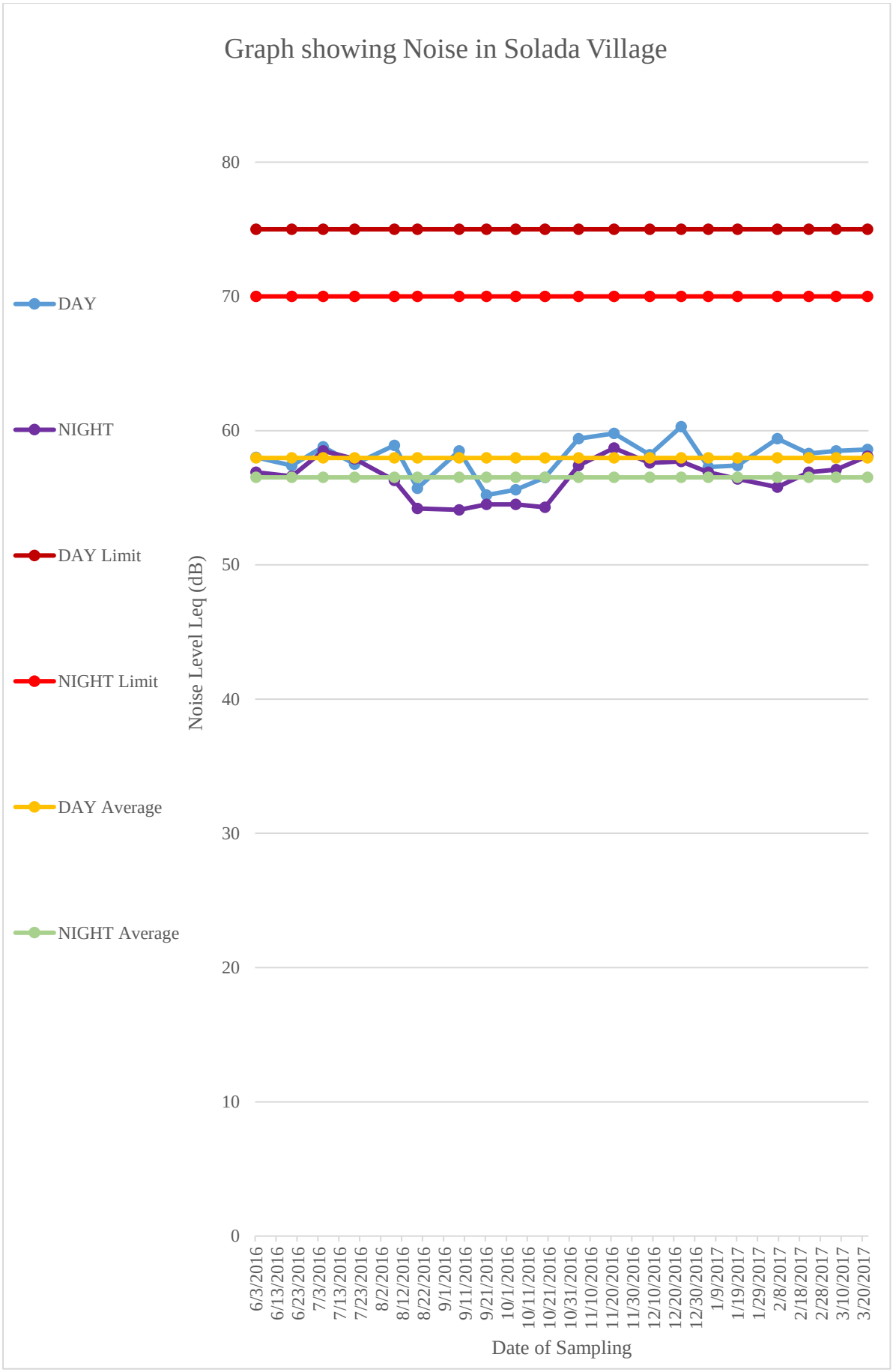

Graph showing Noise in Solada Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:74
Project: Balaram OCP
Monitoring Station: Natada Village

DATE OF SAMPLING	DAY	NIGHT
03-06-2016	59.8	56.6
20-06-2016	56.8	57.3
05-07-2016	58.4	57.8
20-07-2016	59	58.1
08-08-2016	59.1	58
19-08-2016	56.2	57.1
08-09-2016	55.4	56
21-09-2016	56.5	55.2
05-10-2016	57.2	56.3
19-10-2016	58.3	56.2
04-11-2016	60.8	60.2
21-11-2016	56.3	55.9
08-12-2016	59.7	59.5
23-12-2016	60.2	58.5
05-01-2017	55.8	55.4
19-01-2017	59.9	57
07-02-2017	60.7	59.2
22-02-2017	59.5	56.5
07-03-2017	56.1	58.8
22-03-2017	60.1	59
Brief Statistic	**Day**	**Night**
Minimum	**55.40**	**55.20**
Maximum	**60.80**	**60.20**
Mean	**58.29**	**57.43**
Noise Standard	**75**	**70**

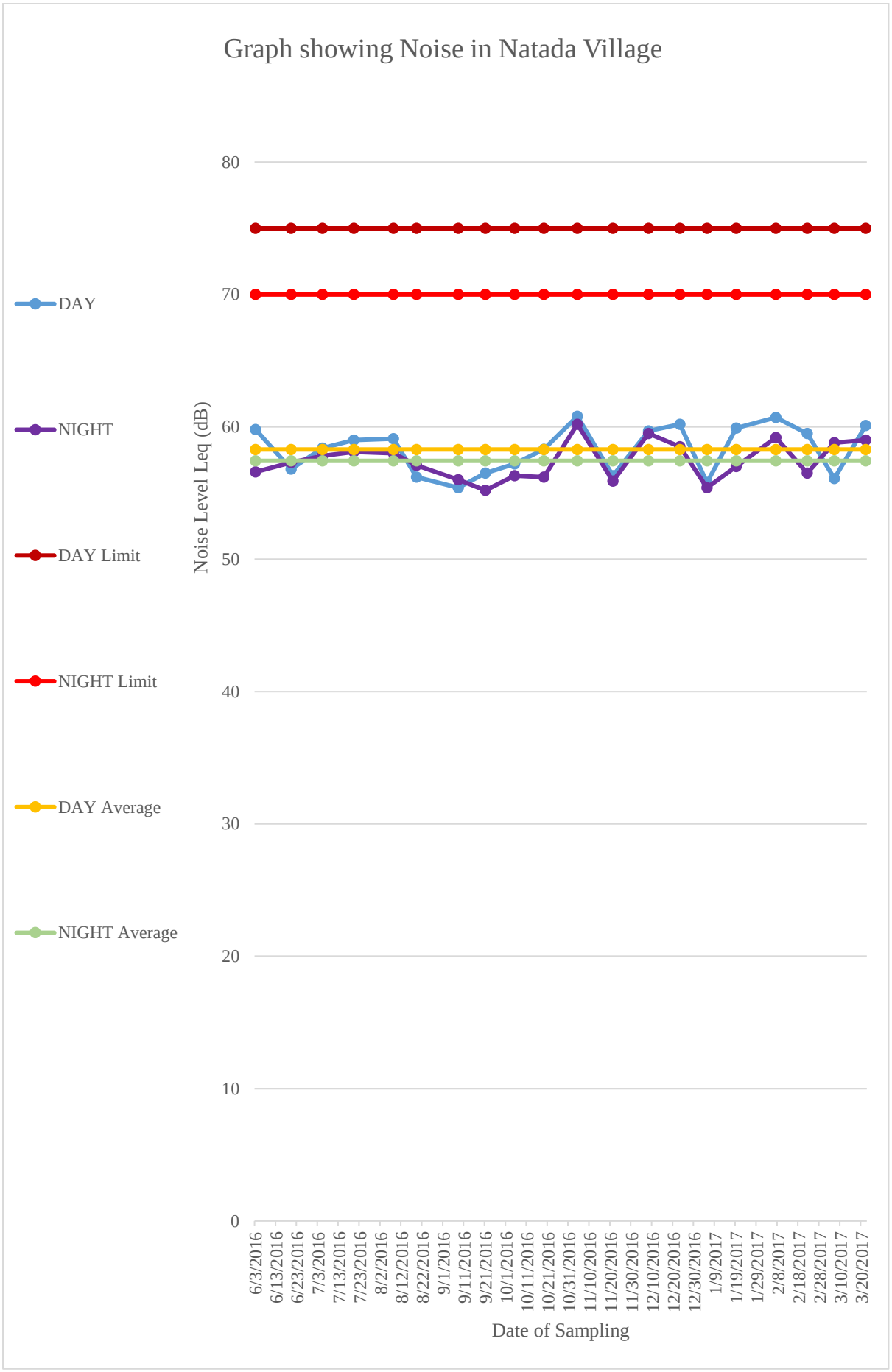

Graph showing Noise in Natada Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/3/2016
6/13/2016
6/23/2016
7/3/2016
7/13/2016
7/23/2016
8/2/2016
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

Table:75
Project: Hingula OCP
Monitoring Station: Bhalugadia Village

DATE OF SAMPLING	DAY	NIGHT
02-06-2016	61.4	56.6
17-06-2016	60.9	57.6
04-07-2016	60.3	56.6
19-07-2016	61.6	55.6
05-08-2016	58.9	54.7
18-08-2016	58.2	56.3
07-09-2016	60.6	57.2
20-09-2016	59.6	56.6
04-10-2016	59.6	56.7
18-10-2016	57.4	56
03-11-2016	62.3	61.8
18-11-2016	58.4	57.3
07-12-2016	58.5	57.8
22-12-2016	57.8	58.2
04-01-2017	56.5	55.2
18-01-2017	60.1	58.3
06-02-2017	60.2	56.4
21-02-2017	60.8	58.2
06-03-2017	59.8	57.1
21-03-2017	59.8	58.9
Brief Statistic	**Day**	**Night**
Minimum	**56.50**	**54.70**
Maximum	**62.30**	**61.80**
Mean	**59.64**	**57.16**
Noise Standard	**75**	**70**

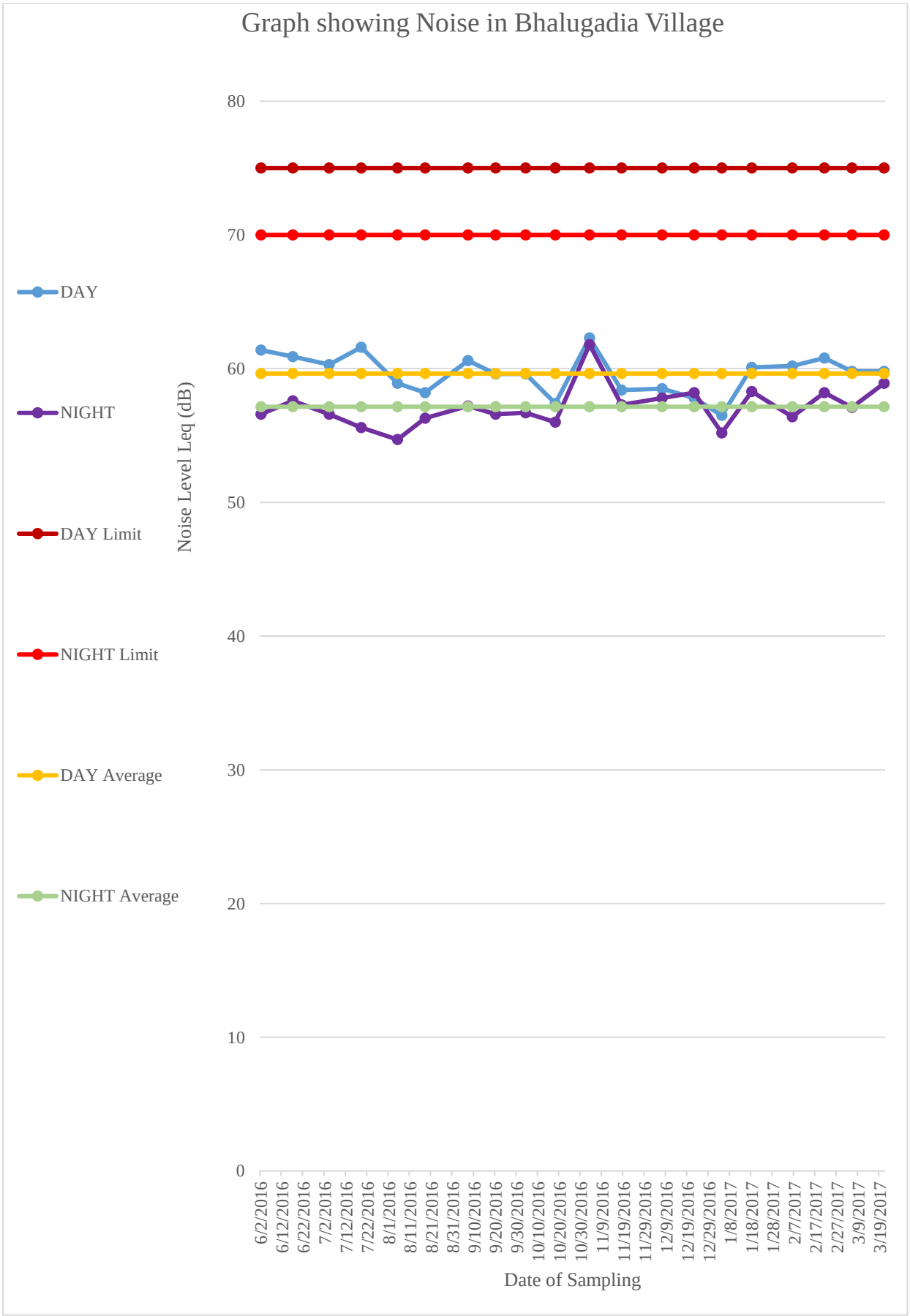

Graph showing Noise in Bhalugadia Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling

Table:76
Project: Hingula OCP
Monitoring Station: Gopalprasad Village

DATE OF SAMPLING	DAY	NIGHT
02-06-2016	61.8	60
17-06-2016	60.7	58.4
04-07-2016	58.5	55.9
19-07-2016	57.9	54.9
Brief Statistic	**Day**	**Night**
Minimum	**57.90**	**54.90**
Maximum	**61.80**	**60.00**
Mean	**59.73**	**57.30**
Noise Standard	**75**	**70**

Table:77
Project: Hingula OCP
Monitoring Station: Kumunda village

DATE OF SAMPLING	DAY	NIGHT
05-08-2016	56.3	55.1
18-08-2016	58.9	57.1
07-09-2016	58.8	56.1
20-09-2016	60.3	55.1
04-10-2016	58.7	56.2
18-10-2016	59.3	56.9
03-11-2016	57.9	61.2
18-11-2016	59.7	58.3
07-12-2016	58.9	56.8
22-12-2016	60.6	54.2
04-01-2017	57.4	58.5
18-01-2017	59.3	57.8
06-02-2017	60.1	58
21-02-2017	58.7	55.2
06-03-2017	55.4	55
21-03-2017	56	58
Brief Statistic	**Day**	**Night**
Minimum	**55.40**	**54.20**
Maximum	**60.60**	**61.20**
Mean	**58.52**	**56.84**
Noise Standard	**75**	**70**

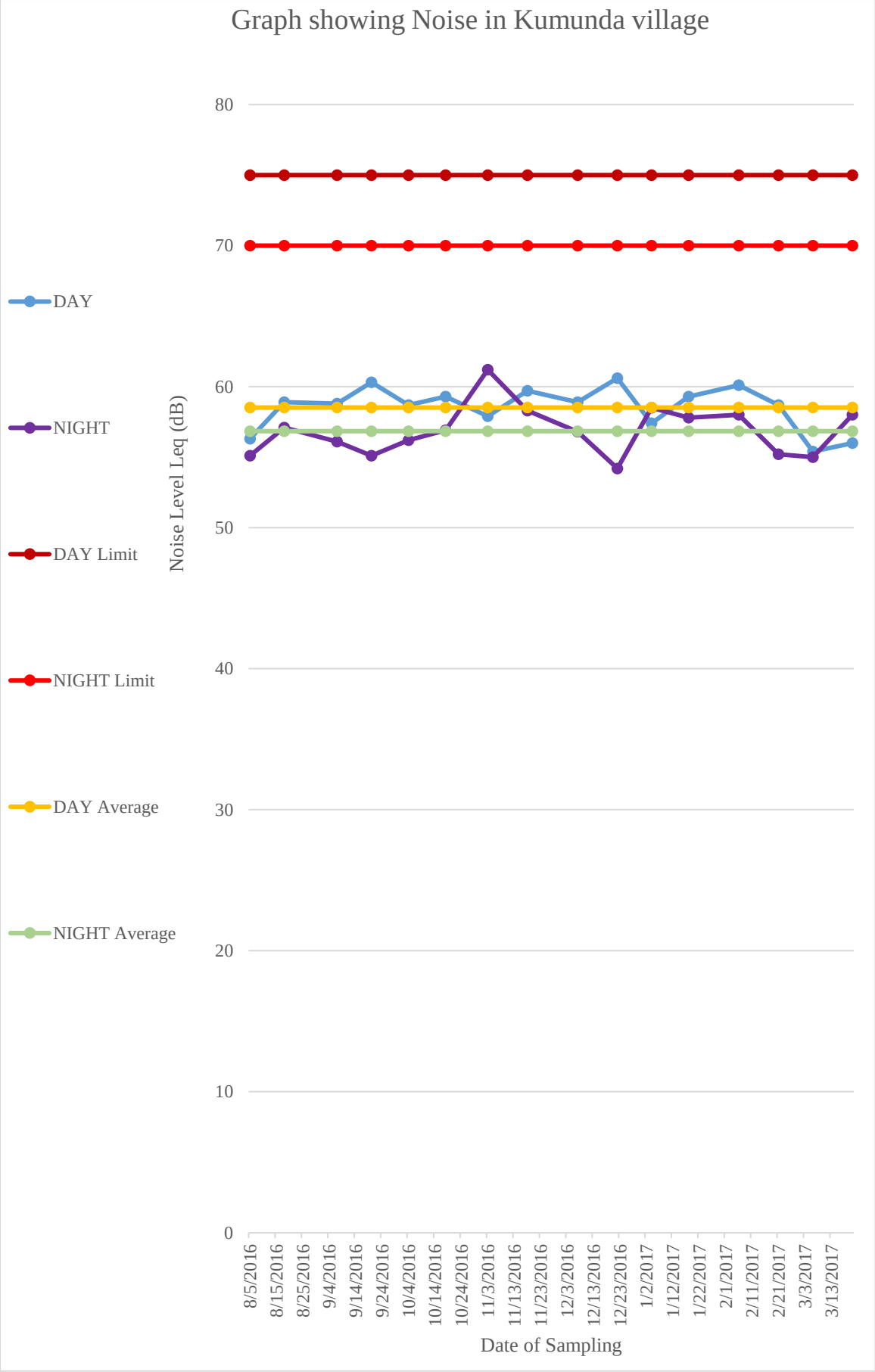

Graph showing Noise in Kumunda village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
8/5/2016
8/15/2016
8/25/2016
9/4/2016
9/14/2016
9/24/2016
10/4/2016
10/14/2016
10/24/2016
11/3/2016
11/13/2016
11/23/2016
12/3/2016
12/13/2016
12/23/2016
1/2/2017
1/12/2017
1/22/2017
2/1/2017
2/11/2017
2/21/2017
3/3/2017
3/13/2017
Date of Sampling

Table:78
Project: Hingula OCP
Monitoring Station: Malibandha Village

DATE OF SAMPLING	DAY	NIGHT
02-06-2016	62.2	57.1
17-06-2016	55.5	56.1
04-07-2016	57.5	52
19-07-2016	56.9	58.9
05-08-2016	58.7	54.8
18-08-2016	56.3	55.6
07-09-2016	56.7	54.6
20-09-2016	57	55.4
04-10-2016	56.8	54.9
18-10-2016	56.2	55.2
03-11-2016	59.3	60
18-11-2016	55.5	56.1
07-12-2016	57.6	57.2
22-12-2016	60.7	56.8
04-01-2017	56.2	55.7
18-01-2017	58.9	56.3
06-02-2017	56.7	54.6
21-02-2017	59.8	58.5
06-03-2017	54.4	51.8
21-03-2017	58.6	59.4
Brief Statistic	**Day**	**Night**
Minimum	**54.40**	**51.80**
Maximum	**62.20**	**60.00**
Mean	**57.58**	**56.05**
Noise Standard	**75**	**70**

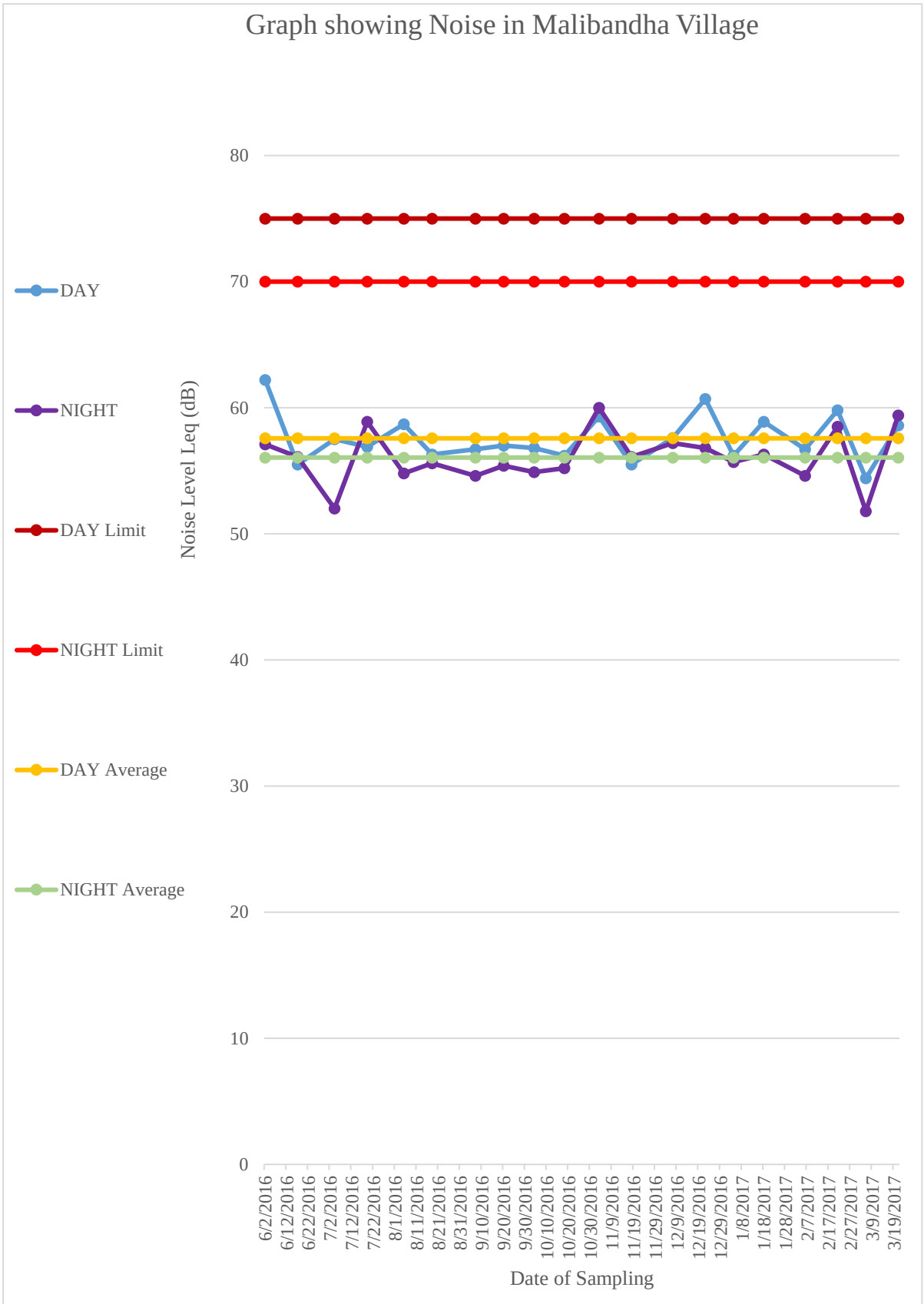

Graph showing Noise in Malibandha Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling

Table:79
Project: Hingula OCP
Monitoring Station: Project Office

DATE OF SAMPLING	DAY	NIGHT
02-06-2016	67.2	63
17-06-2016	61.5	62.4
04-07-2016	66.4	60.2
19-07-2016	64	63.7
05-08-2016	67.4	62.2
18-08-2016	63.8	63.2
07-09-2016	64.8	62.4
20-09-2016	63.8	62.8
04-10-2016	63.7	62.7
18-10-2016	62.6	62.1
03-11-2016	60.8	63.8
18-11-2016	66.9	63.3
07-12-2016	62.2	61.2
22-12-2016	67.3	59.9
04-01-2017	65	63.6
18-01-2017	64	61.1
06-02-2017	63	66.7
21-02-2017	62.7	63.5
06-03-2017	69	65.3
21-03-2017	64.2	64.1
Brief Statistic	**Day**	**Night**
Minimum	**60.80**	**59.90**
Maximum	**69.00**	**66.70**
Mean	**64.52**	**62.86**
Noise Standard	**75**	**70**

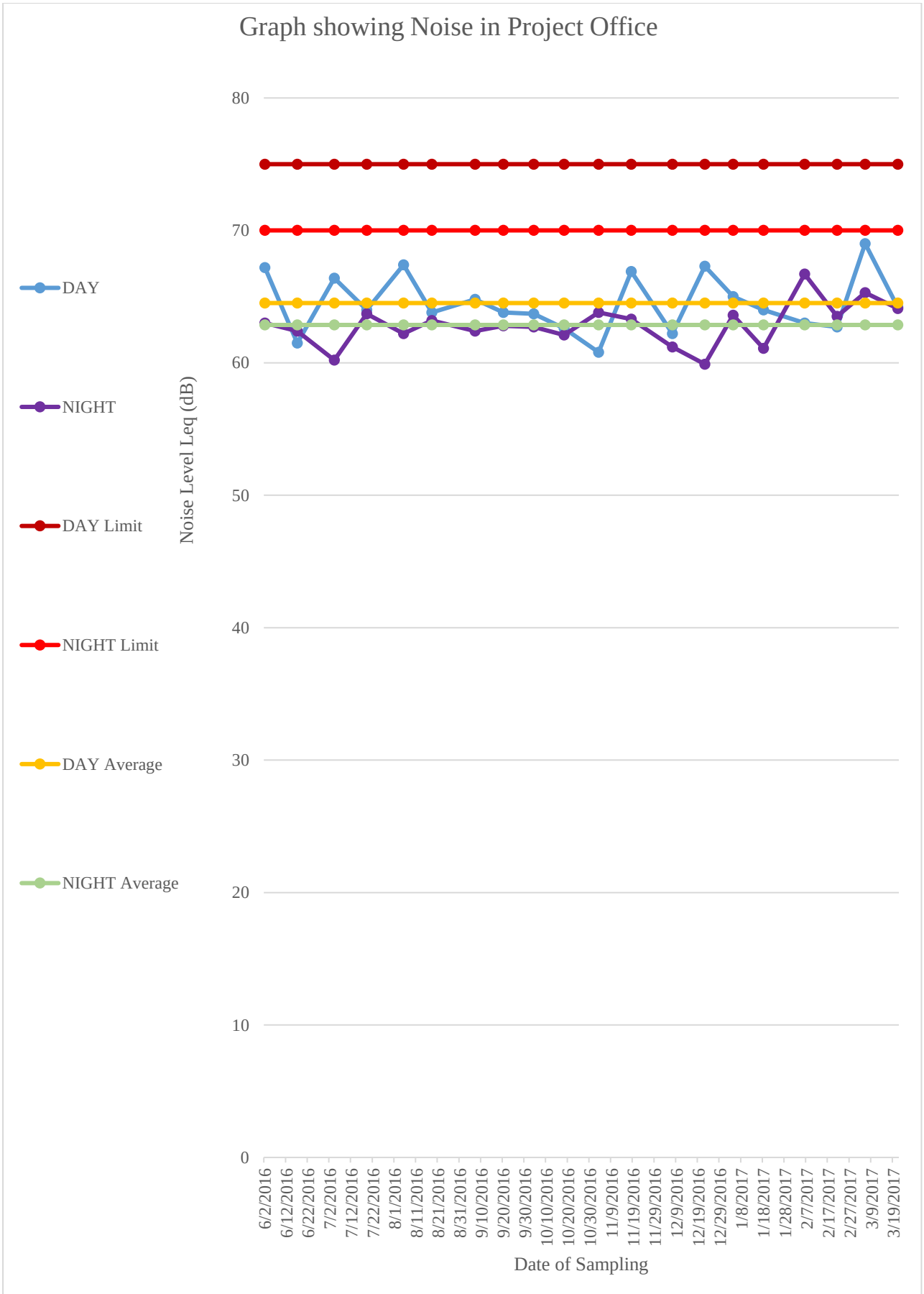

Graph showing Noise in Project Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/2/2016
6/12/2016
6/22/2016
7/2/2016
7/12/2016
7/22/2016
8/1/2016
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
Date of Sampling

Table:80
Project: Deulbera Colliery U/G
Monitoring Station: Deulbera Colony

DATE OF SAMPLING	DAY	NIGHT
14-06-2016	55.7	57
29-06-2016	57.7	56.3
14-07-2016	60.9	55.7
29-07-2016	60.4	58.9
05-08-2016	59.4	57.3
18-08-2016	60.3	59
07-09-2016	58.2	58
27-09-2016	58.7	57
04-10-2016	58.2	56.4
18-10-2016	58.4	57.3
14-11-2016	58.1	56.3
29-11-2016	60.4	59.2
14-12-2016	58.2	56.7
30-12-2016	55.8	56.2
13-01-2017	57.1	58
30-01-2017	59	56.9
15-02-2017	60.4	58.8
28-02-2017	56.2	55.4
15-03-2017	58.1	54.6
30-03-2017	56.8	55.9
Brief Statistic	**Day**	**Night**
Minimum	**55.70**	**54.60**
Maximum	**60.90**	**59.20**
Mean	**58.40**	**57.05**
Noise Standard	**75**	**70**

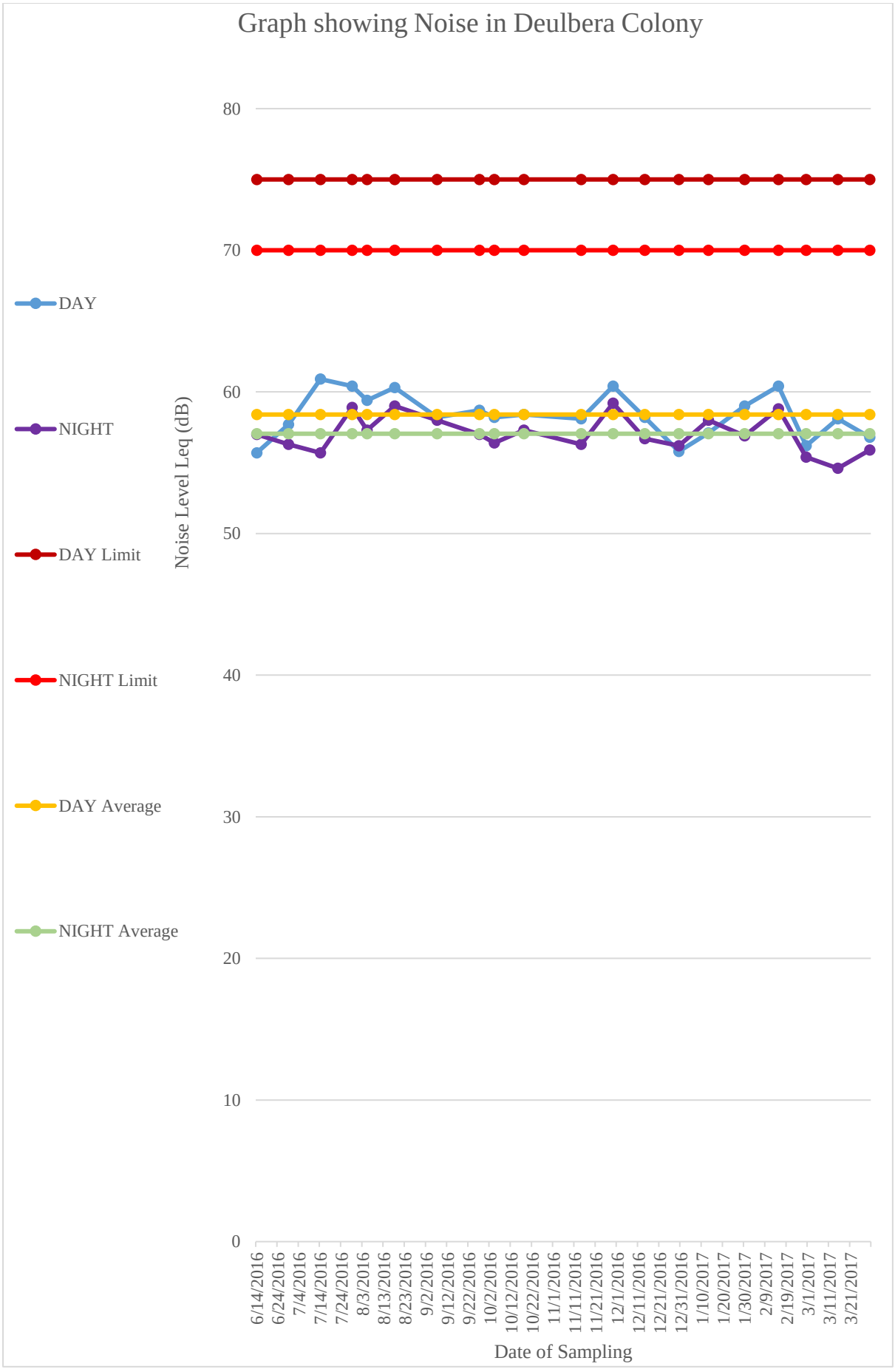

Graph showing Noise in Deulbera Colony
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table: 81

Project: Deulbera Colliery U/G

Monitoring Station: Manager's Office

DATE OF SAMPLING	DAY	NIGHT
14-06-2016	60.7	58.6
29-06-2016	60.1	58.9
14-07-2016	61.3	61.8
29-07-2016	62.1	60.8
05-08-2016	61.6	59
18-08-2016	61.8	60.7
07-09-2016	60.1	59.2
27-09-2016	60.1	58.3
04-10-2016	60.6	58.2
18-10-2016	60.6	58.6
14-11-2016	60.8	56.4
29-11-2016	62.1	61
14-12-2016	60.4	58.9
30-12-2016	59.4	57.8
13-01-2017	62.8	58.9
30-01-2017	60.2	59.6
15-02-2017	61.6	59.8
28-02-2017	62.7	56.3
15-03-2017	60.6	56.6
30-03-2017	57.9	58.4
Brief Statistic	**Day**	**Night**
Minimum	**57.90**	**56.30**
Maximum	**62.80**	**61.80**
Mean	**60.88**	**58.89**
Noise Standard	**75**	**70**

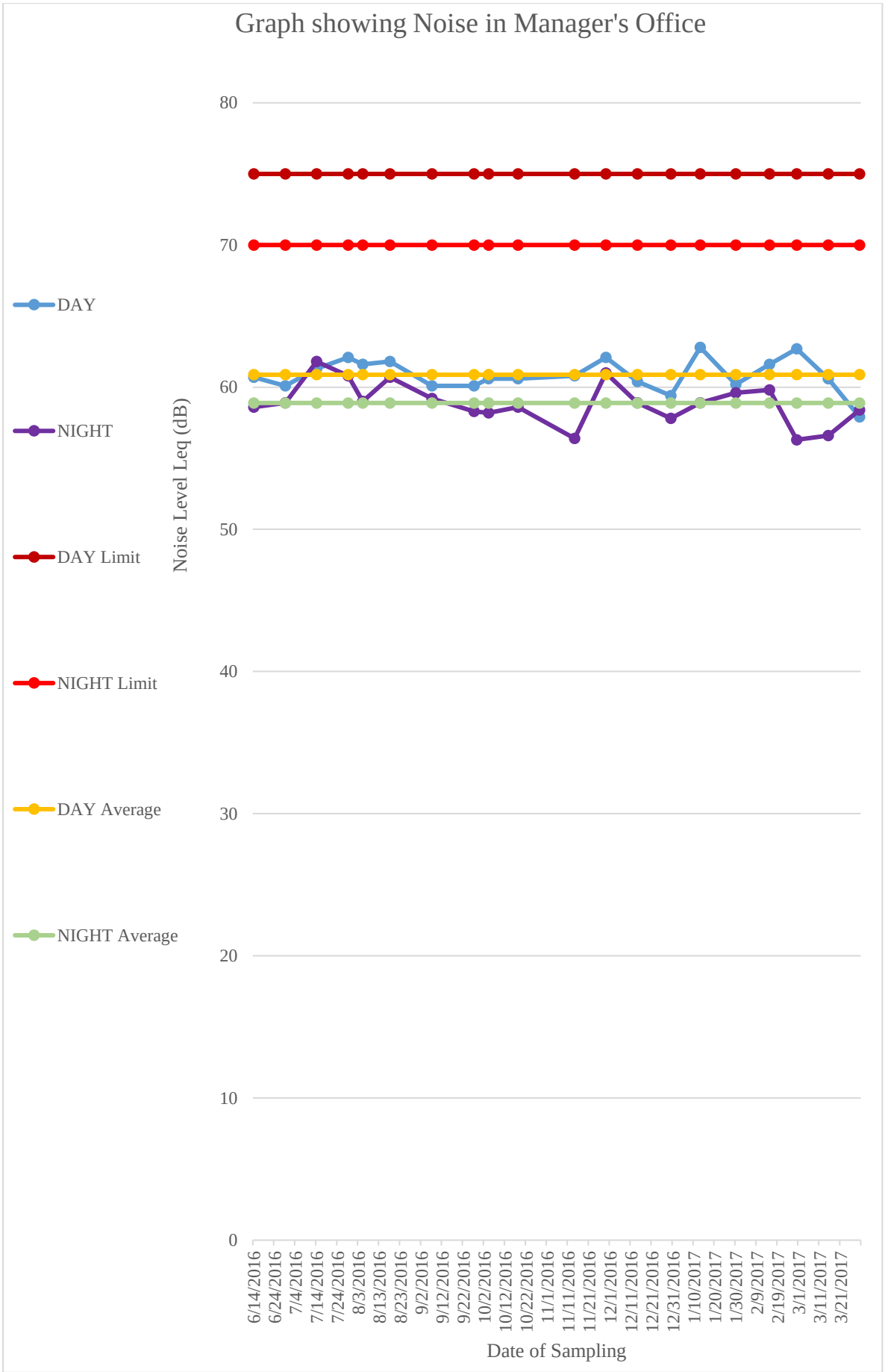

Graph showing Noise in Manager's Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table:82

Project: Deulbera Colliery U/G

Monitoring Station: Deulbera Colliery, Mandapal sand mine

DATE OF SAMPLING	DAY	NIGHT
14-07-2016	58.4	55.2
29-07-2016	58.2	55.7
04-08-2016	56.7	52.2
17-08-2016	57.1	55.4
06-09-2016	57.4	54.7
19-09-2016	55.7	54.1
03-10-2016	57.4	55.7
17-10-2016	58.2	56.1
01-11-2016	55.9	55.4
16-11-2016	56.5	59.1
01-12-2016	61	58.7
16-12-2016	57.2	57.1
03-01-2017	57.8	54.6
17-01-2017	55.5	56
01-02-2017	57.5	54.4
16-02-2017	58	56.9
01-03-2017	58.9	58
16-03-2017	60.2	59
Brief Statistic	**Day**	**Night**
Minimum	**55.50**	**52.20**
Maximum	**61.00**	**59.10**
Mean	**57.64**	**56.02**
Noise Standard	**75**	**70**

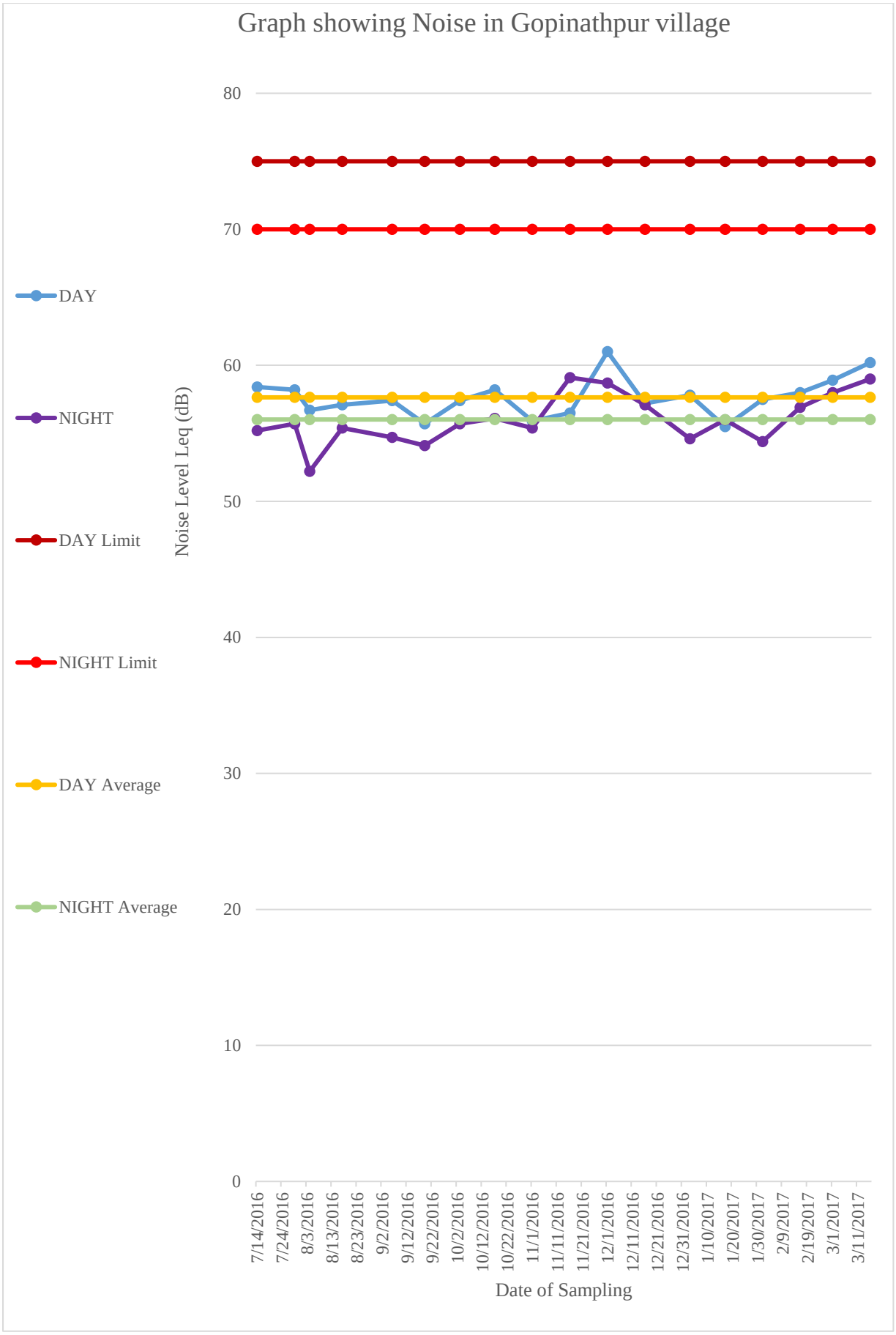

Graph showing Noise in Gopinathpur village
80
70
60
50
40
30
20
10
0
Noise Level Leq (dB)
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
Date of Sampling

Table:83
Project: Nandira Colliery U/G
Monitoring Station: Natedi Village

DATE OF SAMPLING	DAY	NIGHT
14-06-2016	56.2	57.7
29-06-2016	58.2	55.9
14-07-2016	55.6	56.6
29-07-2016	59	57.1
12-08-2016	57.1	55.7
25-08-2016	56.2	55
14-09-2016	55.8	54.6
27-09-2016	56.2	54.6
07-10-2016	57.1	55.8
28-10-2016	58.1	55.3
14-11-2016	57.4	53.4
29-11-2016	60.5	59.4
14-12-2016	58.3	56.4
30-12-2016	58	55.3
13-01-2017	59.5	57.5
30-01-2017	58.1	57.8
15-02-2017	58.8	56.8
28-02-2017	57.7	56.5
15-03-2017	60.8	56.4
30-03-2017	56.8	56
Brief Statistic	**Day**	**Night**
Minimum	**55.60**	**53.40**
Maximum	**60.80**	**59.40**
Mean	**57.77**	**56.19**
Noise Standard	**75**	**70**

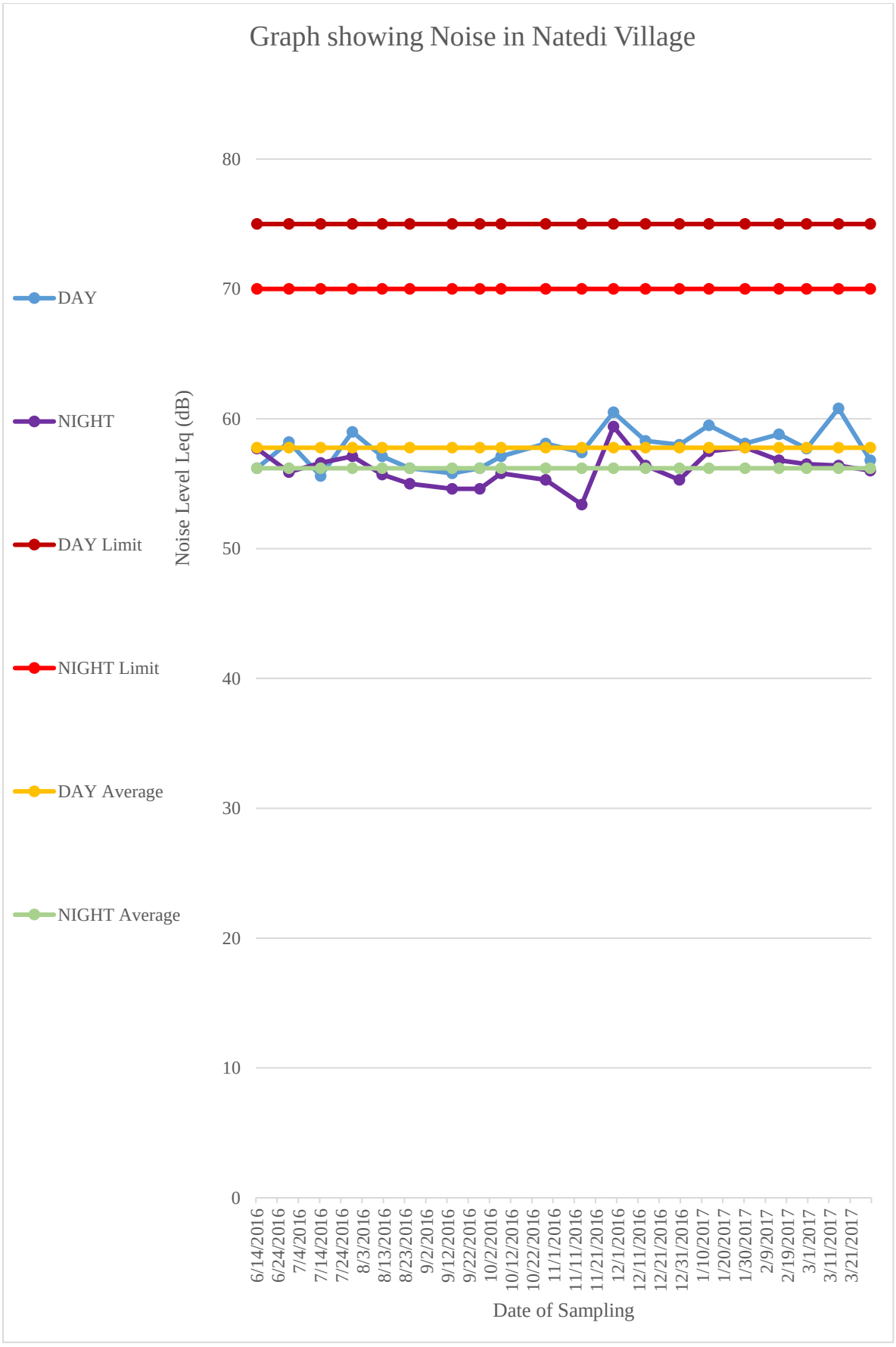

Graph showing Noise in Natedi Village
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table:84
Project: Nandira Colliery U/G
Monitoring Station: Project Office

DATE OF SAMPLING	DAY	NIGHT
14-06-2016	63.9	62.7
29-06-2016	61.9	59
14-07-2016	63.5	63.2
29-07-2016	60.3	61.4
12-08-2016	62.5	51.2
25-08-2016	62.6	62.3
14-09-2016	62.1	61.8
27-09-2016	62.4	61.3
07-10-2016	62.3	60.9
28-10-2016	62.3	61.5
14-11-2016	59.9	56.8
29-11-2016	62.5	61.1
14-12-2016	64	61.6
30-12-2016	62.3	61
13-01-2017	61.5	60
30-01-2017	63.9	62.2
15-02-2017	61.8	62.6
28-02-2017	63.8	62.7
15-03-2017	61.3	60.7
30-03-2017	63.1	61.4
Brief Statistic	**Day**	**Night**
Minimum	**59.90**	**51.20**
Maximum	**64.00**	**63.20**
Mean	**62.40**	**60.77**
Noise Standard	**75**	**70**

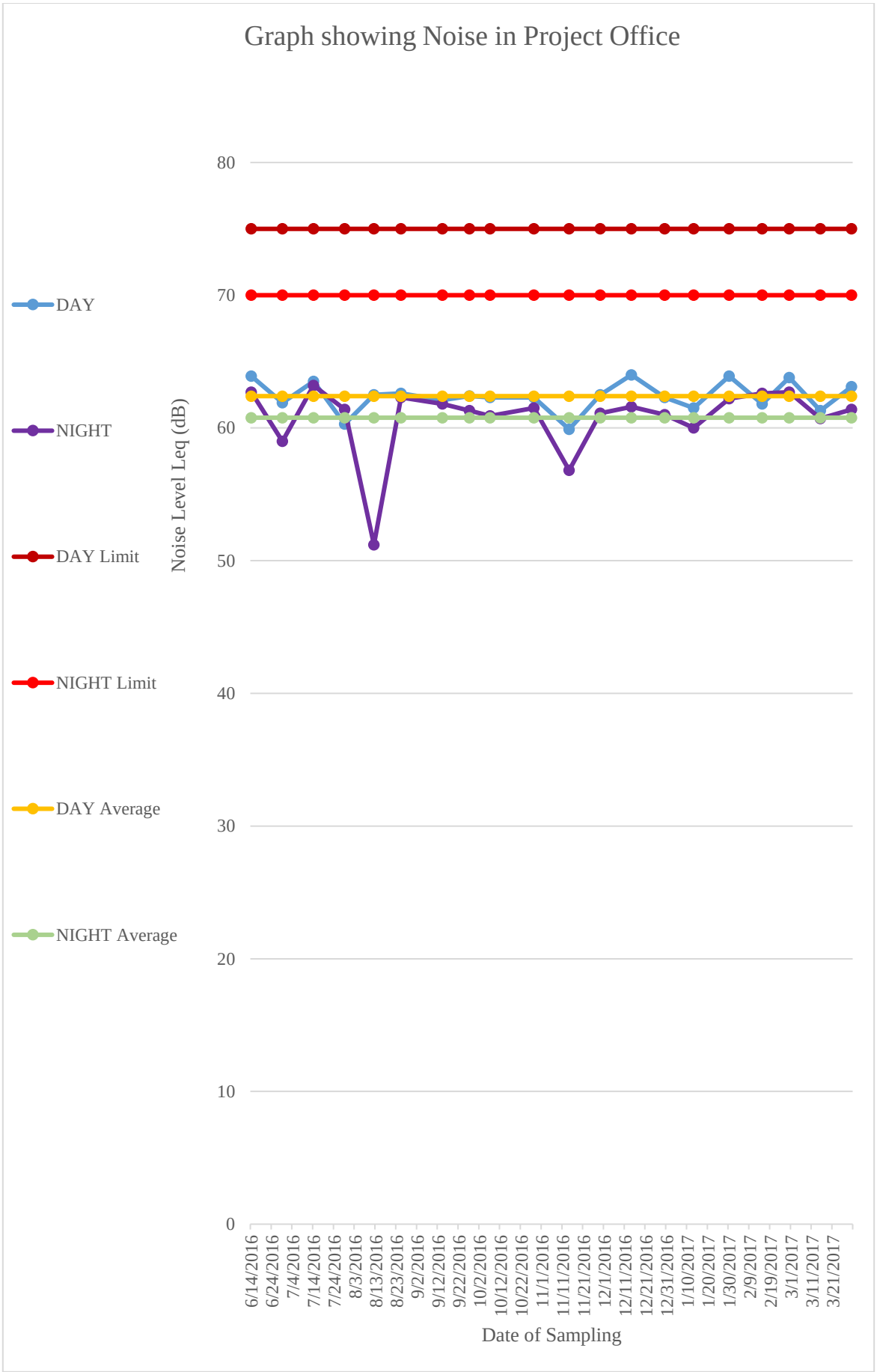

Graph showing Noise in Project Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table: 85
Project: Talcher Colliery U/G
Monitoring Station: GM Office

DATE OF SAMPLING	DAY	NIGHT
14-07-2016	59.3	57.2
29-07-2016	61.3	61.1
11-08-2016	62.6	61.7
24-08-2016	63.5	61.1
13-09-2016	63.2	62.5
23-09-2016	63.4	62
12-10-2016	62.4	61
28-10-2016	62.7	61.7
14-11-2016	59.2	57.2
29-11-2016	62.3	61.2
14-12-2016	63.1	61.1
30-12-2016	60.9	59.6
13-01-2017	62.9	61.1
30-01-2017	64.1	61.6
15-02-2017	62.1	61.3
28-02-2017	61.2	59.4
15-03-2017	62.7	58.1
30-03-2017	61.2	57.3
Brief Statistic	**Day**	**Night**
Minimum	**59.2**	**57.2**
Maximum	**64.1**	**62.5**
Mean	**62.12**	**60.34**
Noise Standard	**75**	**70**

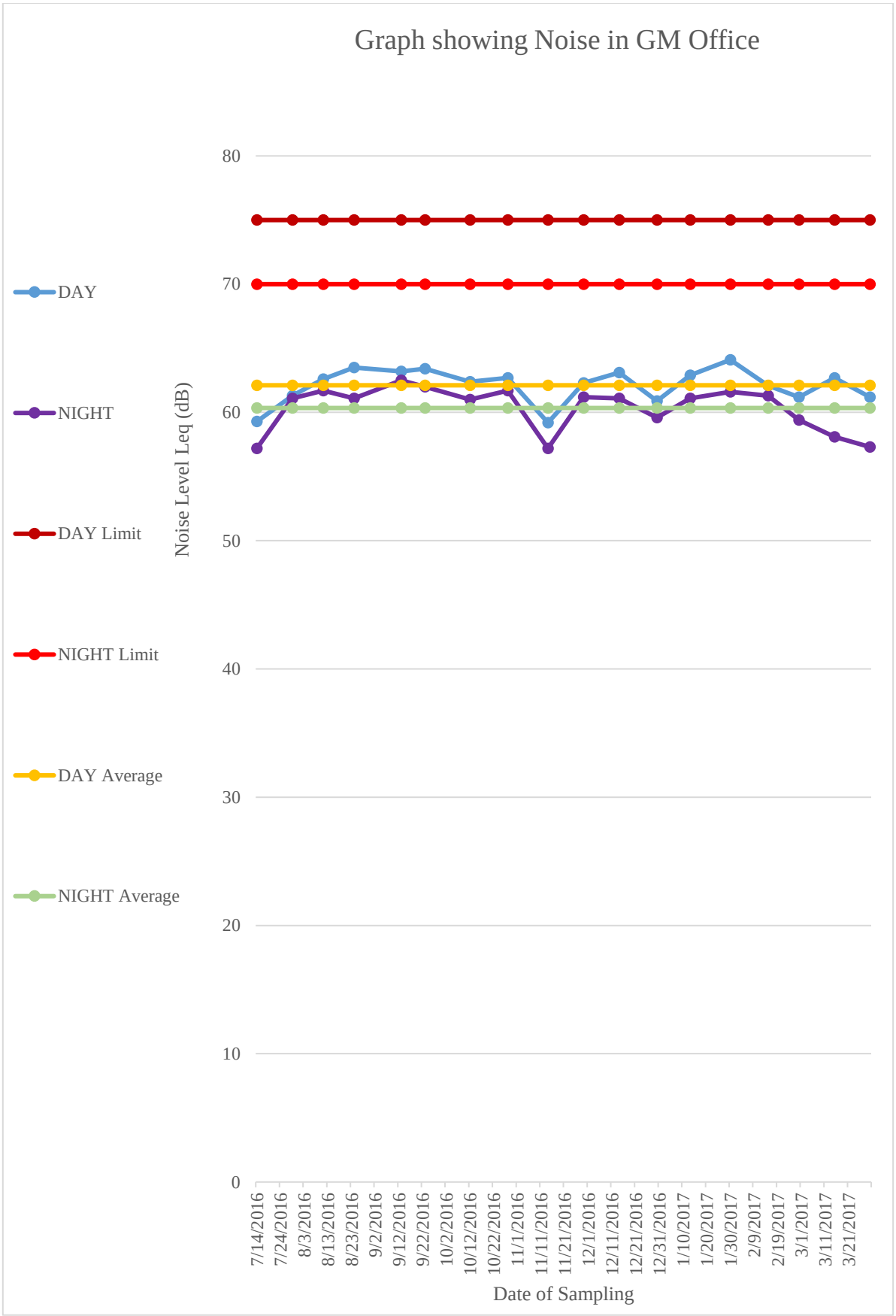

Graph showing Noise in GM Office
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80
70
60
50
40
30
20
10
0
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table:86
Project: Talcher Colliery U/G
Monitoring Station: Canteen Talcher Colliery

DATE OF SAMPLING	DAY	NIGHT
14-07-2016	61.4	60.1
29-07-2016	61.1	62.0
11-08-2016	63.2	62.0
24-08-2016	64.8	62.6
13-09-2016	63.9	63.0
23-09-2016	64.2	62.3
12-10-2016	63.6	62.3
28-10-2016	63.8	62.9
14-11-2016	60.2	59.4
29-11-2016	63.5	62.1
14-12-2016	65.4	64.4
30-12-2016	62.4	60.1
13-01-2017	64.1	61.3
30-01-2017	64.9	62.5
15-02-2017	62.8	62.1
28-02-2017	63.1	63.5
15-03-2017	63.9	61.8
30-03-2017	63.4	63.7
Brief Statistic	**Day**	**Night**
Minimum	**60.2**	**59.4**
Maximum	**65.4**	**64.4**
Mean	**63.32**	**62.12**
Noise Standard	**75**	**70**

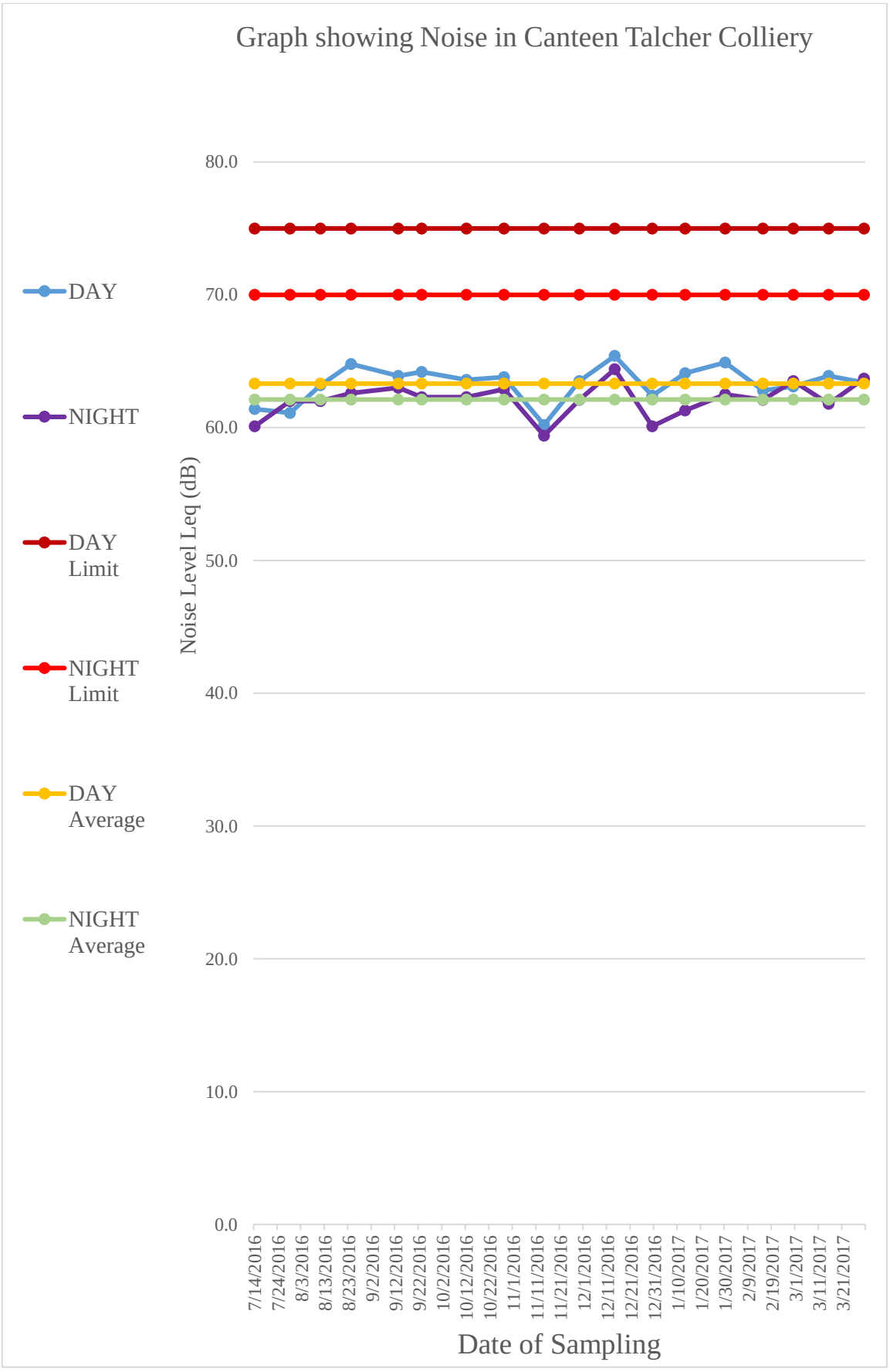
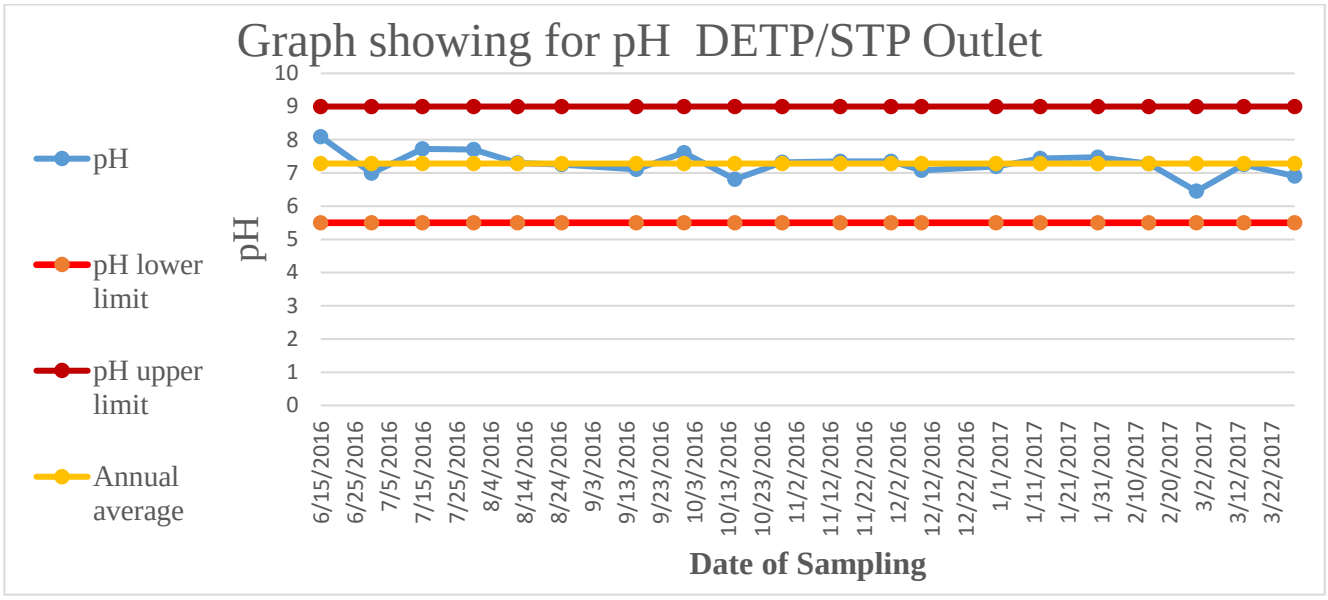
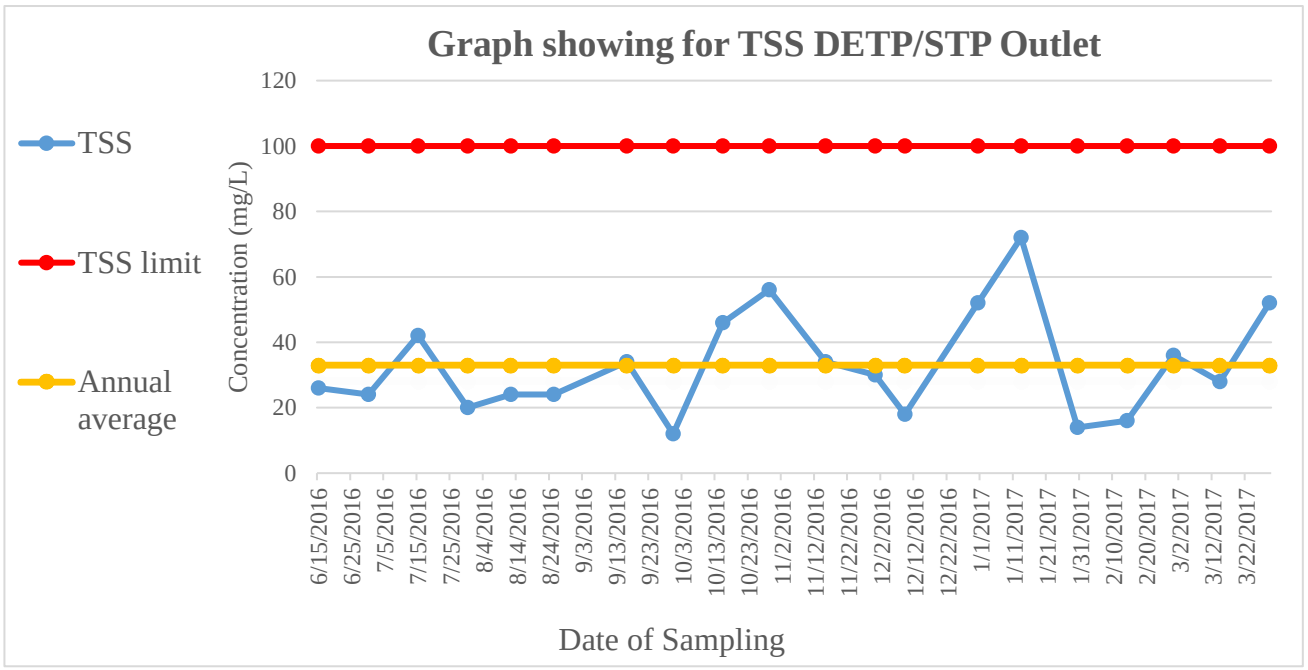

Graph showing Noise in Canteen Talcher Colliery
DAY
NIGHT
DAY Limit
NIGHT Limit
DAY Average
NIGHT Average
Noise Level Leq (dB)
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table:87
Project: Ananta OCP
Monitoring Station: DETP / STP outlet

Date of Sampling	pH	TSS	BOD
15-06-2016	8.09	26	6.3
30-06-2016	6.99	24	7.5
15-07-2016	7.72	42	8
30-07-2016	7.71	20	7.3
12-08-2016	7.3	24	5.3
25-08-2016	7.25	24	5.5
16-09-2016	7.11	34	7.1
30-09-2016	7.61	12	4.9
15-10-2016	6.81	46	5.5
29-10-2016	7.32	56	4.9
15-11-2016	7.35	34	8.1
30-11-2016	7.35	30	8.3
09-12-2016	7.08	18	7.3
31-12-2016	7.19	52	5.8
13-01-2017	7.44	72	2.9
30-01-2017	7.47	14	3.5
14-02-2017	7.28	16	2.9
28-02-2017	6.45	36	2.8
14-03-2017	7.25	28	3.4
29-03-2017	6.91	52	3.2

All values are in mg/L except pH


Graph showing for pH DETP/STP Outlet
pH
pH lower limit
pH upper limit
Annual average
pH
Date of Sampling


Graph showing for TSS DETP/STP Outlet
TSS
TSS limit
Annual average
Concentration (mg/L)
Date of Sampling

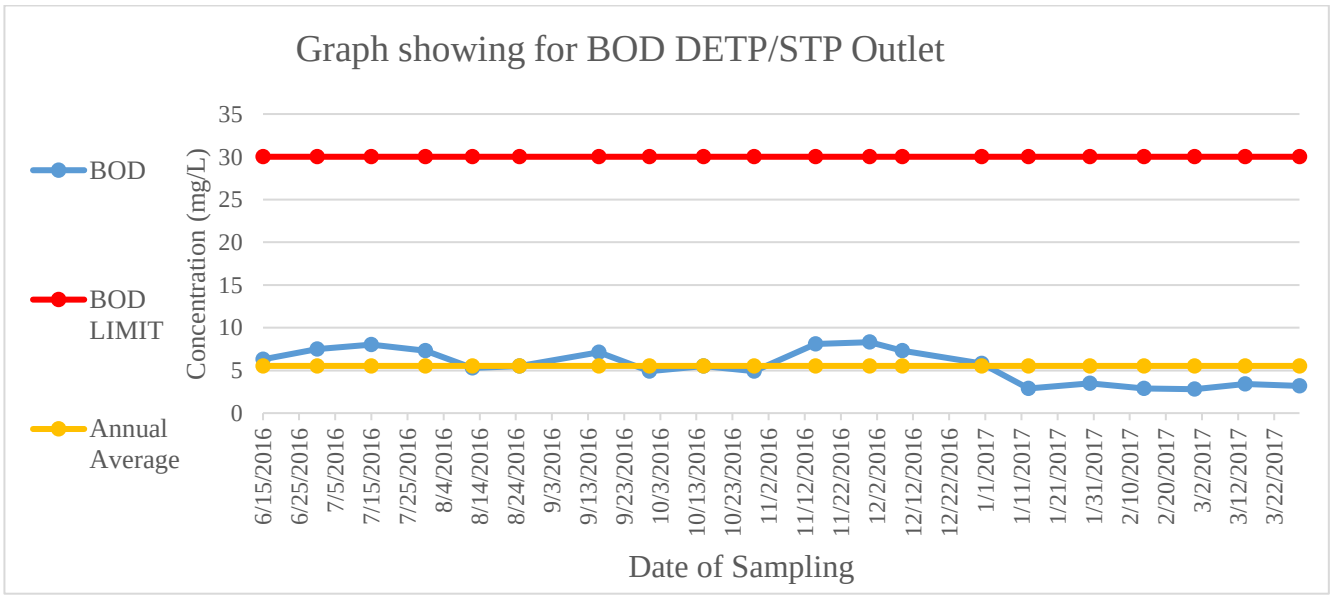

Graph showing for BOD DETP/STP Outlet
BOD
BOD LIMIT
Annual Average
Concentration (mg/L)
Date of Sampling

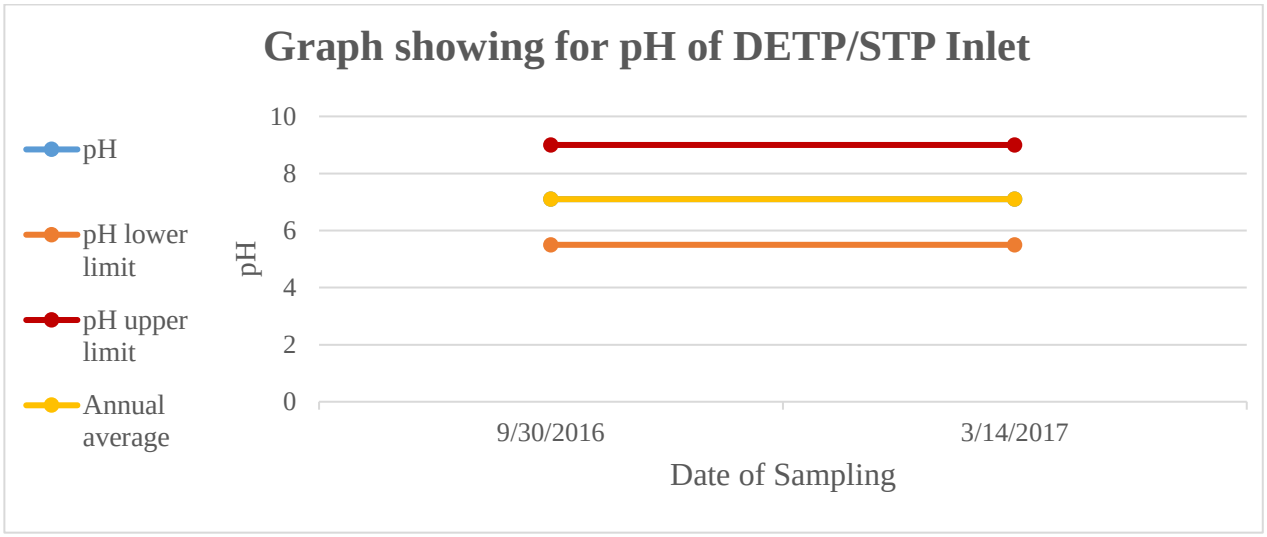
Table:88

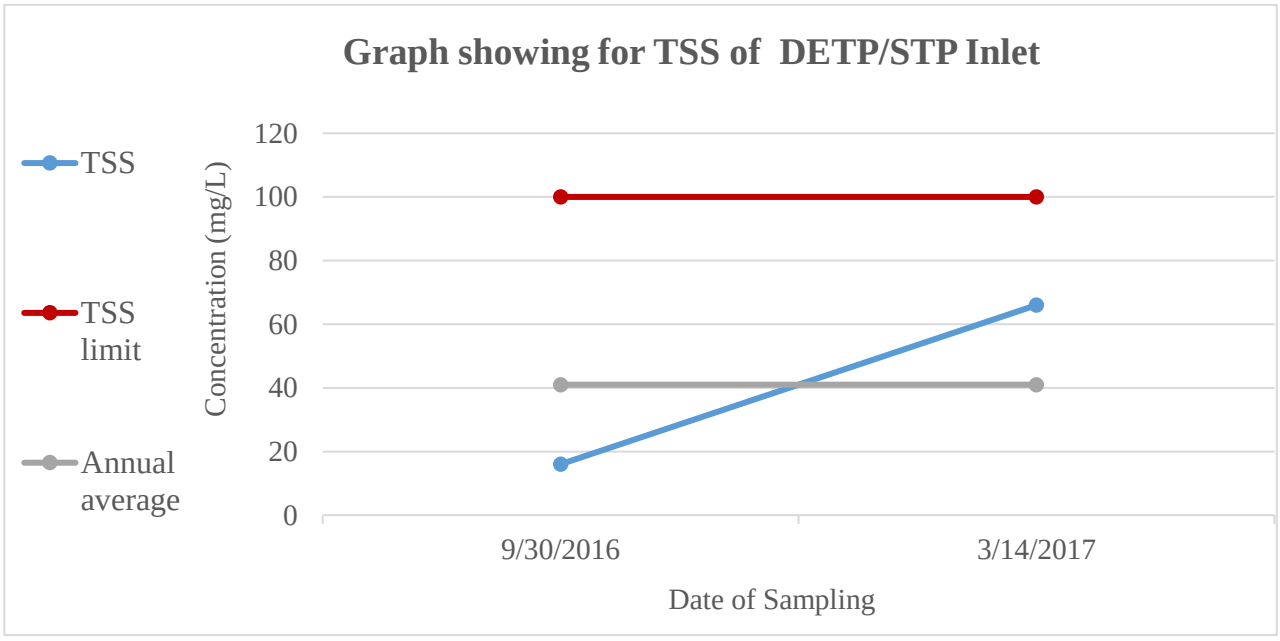
Project: Ananta OCP

Monitoring Station: DETP/STP Inlet

Date of Sampling	pH	TSS	BOD
30-09-2016	7.1	16	6.1
14-03-2017	7.1	66	3.1

All values are in mg/L except pH


Graph showing for pH of DETP/STP Inlet
pH
pH lower limit
pH upper limit
Annual average
10
8
6
4
2
0
pH
9/30/2016
3/14/2017
Date of Sampling


Graph showing for TSS of DETP/STP Inlet
TSS
TSS limit
Annual average
120
100
80
60
40
20
0
Concentration (mg/L)
9/30/2016
3/14/2017
Date of Sampling

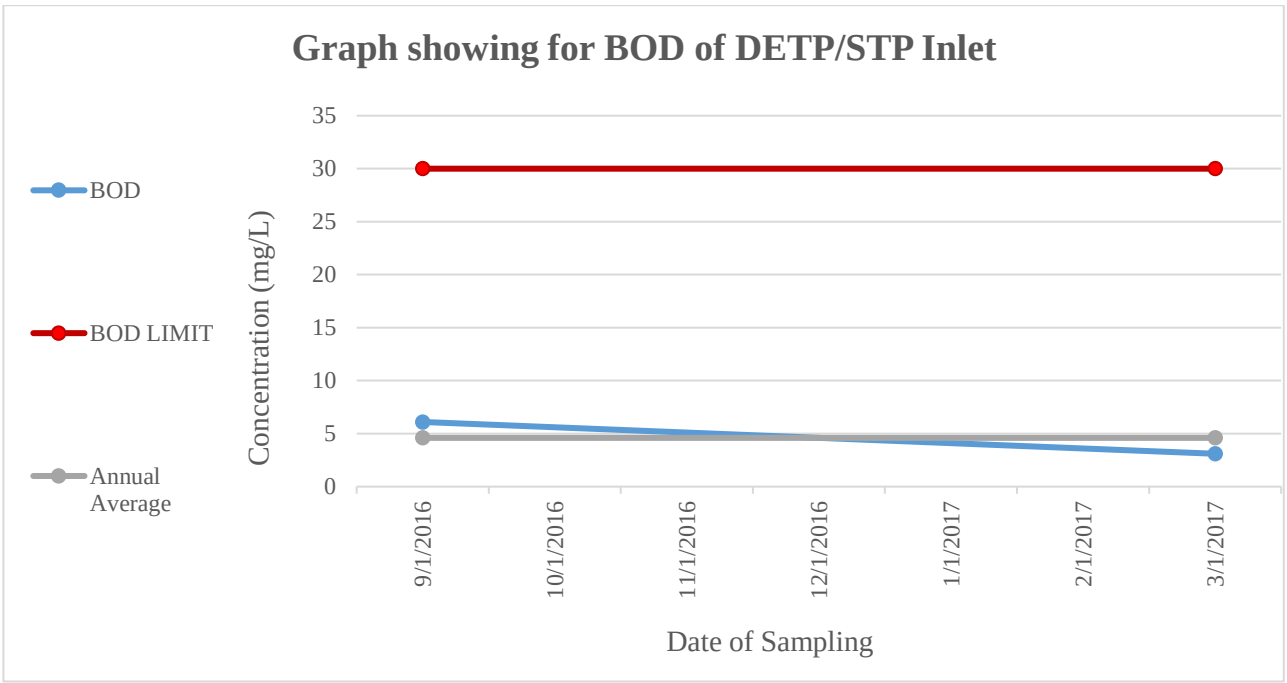

Graph showing for BOD of DETP/STP Inlet
BOD
BOD LIMIT
Annual Average
35
30
25
20
15
10
5
0
Concentration (mg/L)
9/1/2016
10/1/2016
11/1/2016
12/1/2016
1/1/2017
2/1/2017
3/1/2017
Date of Sampling

Table: 89
Project: Ananta OCP
Monitoring Station: Mine sump water

Date of Sampling	pH
15-12-2016	6.91
14-03-2017	7.01
15-06-2016	6.86

All values are in mg/L except pH

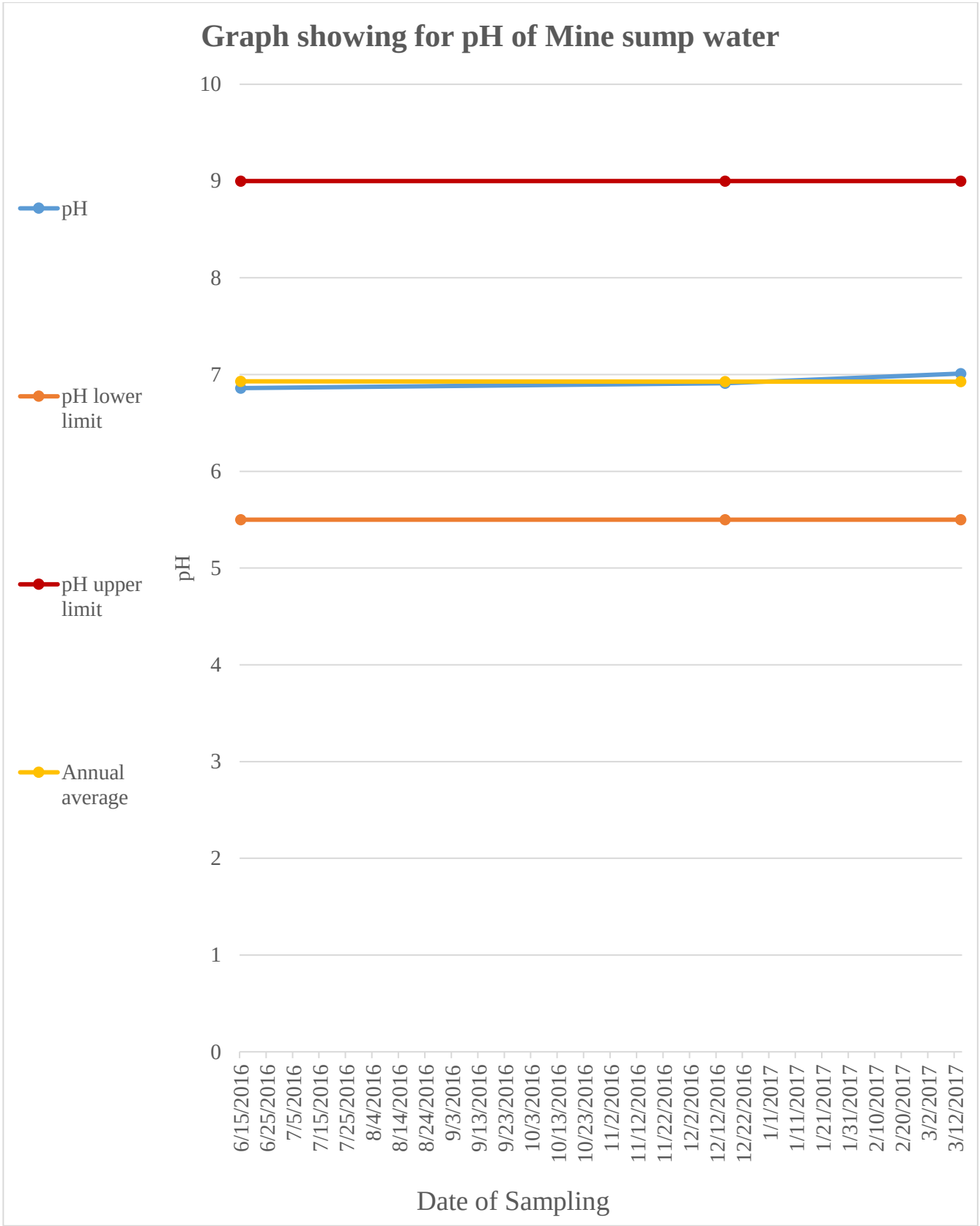

Graph showing for pH of Mine sump water
10
9
8
7
6
5
4
3
2
1
0
pH
pH
pH lower limit
pH upper limit
Annual average
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling

Table:90
Project: Ananta OCP
Monitoring Station: O & G Trap Inlet

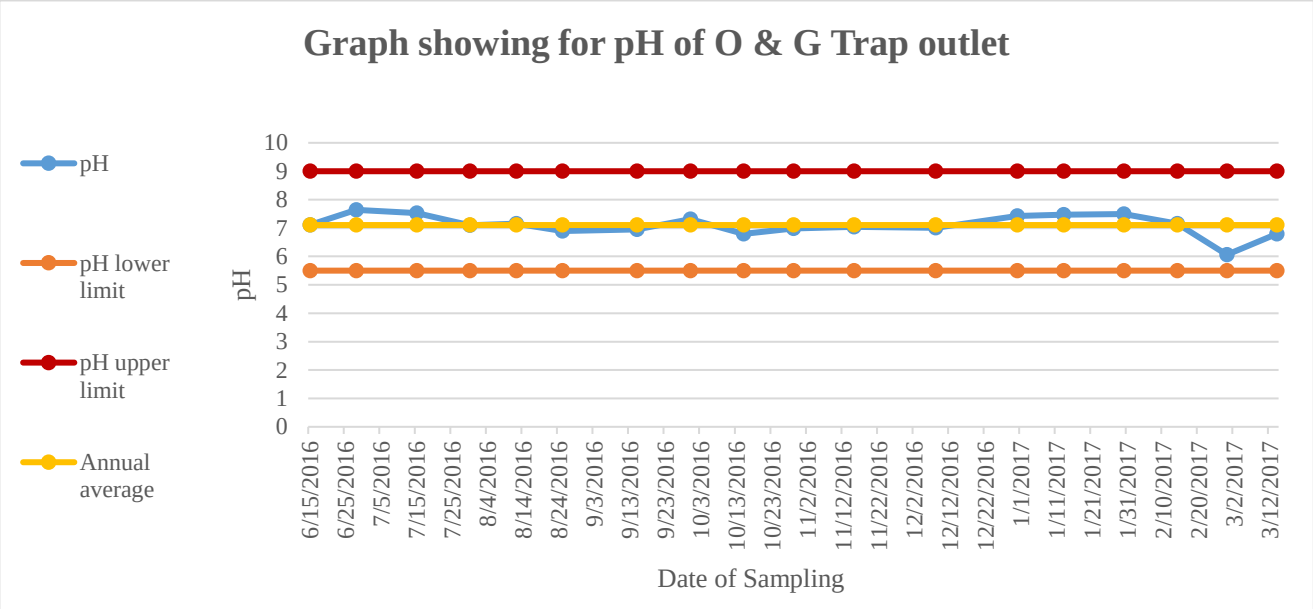
Date of Sampling	pH	Oil & Grease	TSS	COD
29-09-2016	7.09	<4.0	30	94
14-03-2017	6.79	<4.0	48	36

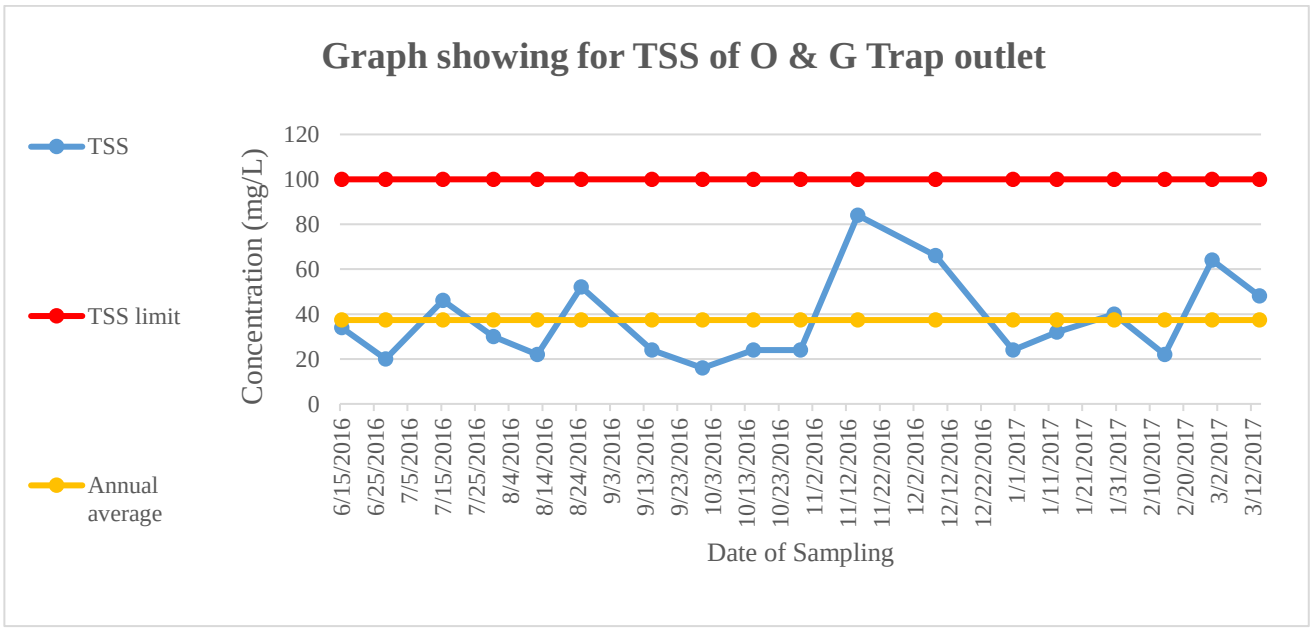
All values are in mg/L except pH

Table:91
Project: Ananta OCP
Monitoring Station: O & G Trap outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
15-06-2016	7.11	<4.0	34	68
28-06-2016	7.64	<4.0	20	76
15-07-2016	7.53	<4.0	46	52
30-07-2016	7.1	<4.0	30	48
12-08-2016	7.15	<4.0	22	64
25-08-2016	6.9	<4.0	52	72
15-09-2016	6.95	<4.0	24	64
30-09-2016	7.31	<4.0	16	24
15-10-2016	6.79	<4.0	24	44
29-10-2016	6.98	<4.0	24	48
15-11-2016	7.04	<4.0	84	116
08-12-2016	7.01	<4.0	66	52
31-12-2016	7.43	<4.0	24	9.2
13-01-2017	7.47	<4.0	32	16
30-01-2017	7.49	<4.0	40	36
14-02-2017	7.15	<4.0	22	12
28-02-2017	6.06	<4.0	64	40
14-03-2017	6.79	<4.0	48	36

All values are in mg/L except pH


Graph showing for pH of O & G Trap outlet
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling


Graph showing for TSS of O & G Trap outlet
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling

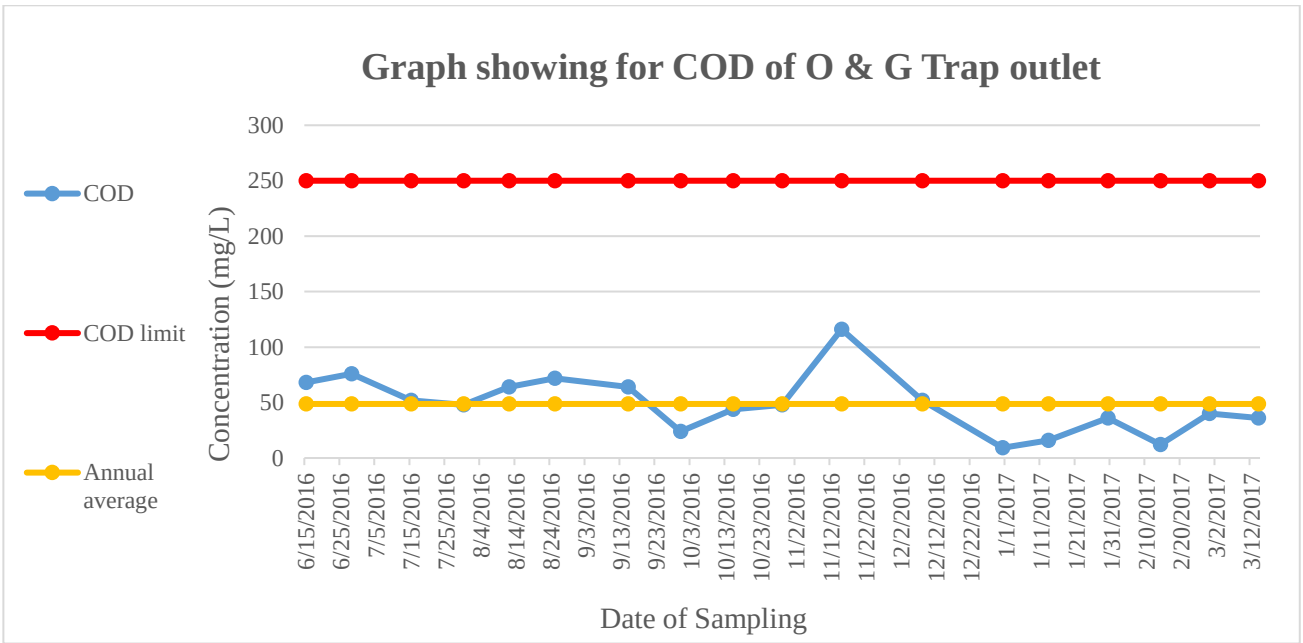

Graph showing for COD of O & G Trap outlet
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling

Table:92
Project: Ananta OCP
Monitoring Station: O & G Trap outlet (Half yearly)

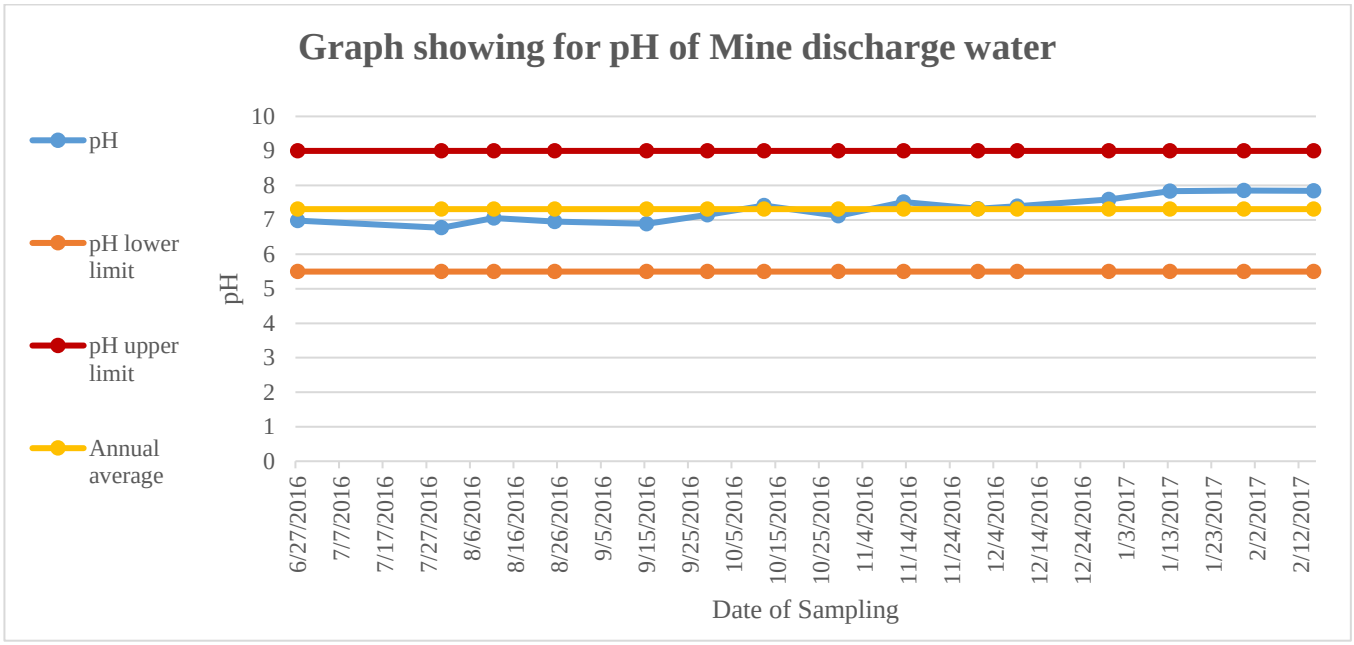
Date of Sampling	pH	Oil & Grease	TSS	COD
14-03-2017	6.83	<4.0	32	12
29-03-2017	6.7	<4.0	88	160

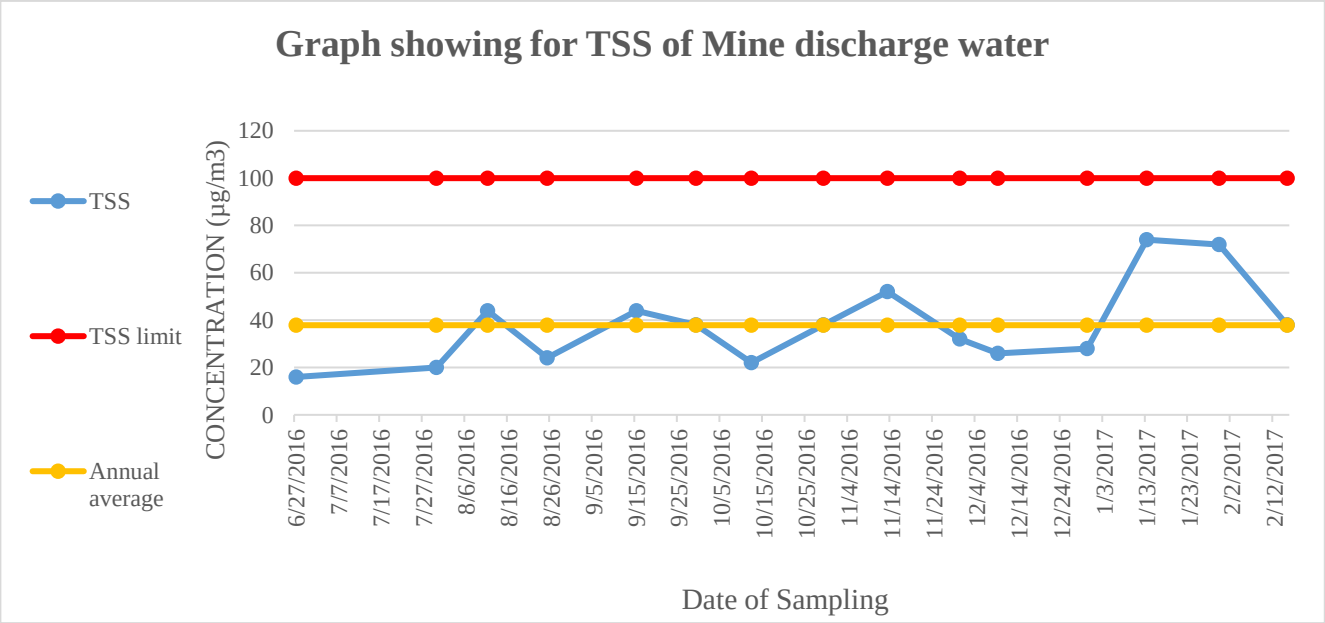
All values are in mg/L except pH

Table:93
Project: Bhubaneswari OCP
Monitoring Station: Mine discharge water

Date of Sampling	pH	Oil & Grease	TSS	COD
27-06-2016	6.98	<4.0	16	28
14-07-2016	No discharge			
30-07-2016	6.77	<4.0	20	28
11-08-2016	7.05	<4.0	44	28
25-08-2016	6.95	<4.0	24	36
15-09-2016	6.89	<4.0	44	16
29-09-2016	7.15	<4.0	38	20
12-10-2016	7.41	<4.0	22	16
29-10-2016	7.12	<4.0	38	68
13-11-2016	7.52	<4.0	52	40
30-11-2016	7.32	<4.0	32	24
09-12-2016	7.4	<4.0	26	20
30-12-2016	7.59	<4.0	28	11.6
13-01-2017	7.83	<4.0	74	56
30-01-2017	7.85	<4.0	72	44
15-02-2017	7.84	<4.0	38	20
28-02-2017	DRY			
14-03-2017	DRY			
29-03-2017	DRY			

All values are in mg/L except pH


Graph showing for pH of Mine discharge water
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
Date of Sampling


Graph showing for TSS of Mine discharge water
TSS
TSS limit
Annual average
CONCENTRATION (µg/m3)
120
100
80
60
40
20
0
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
Date of Sampling

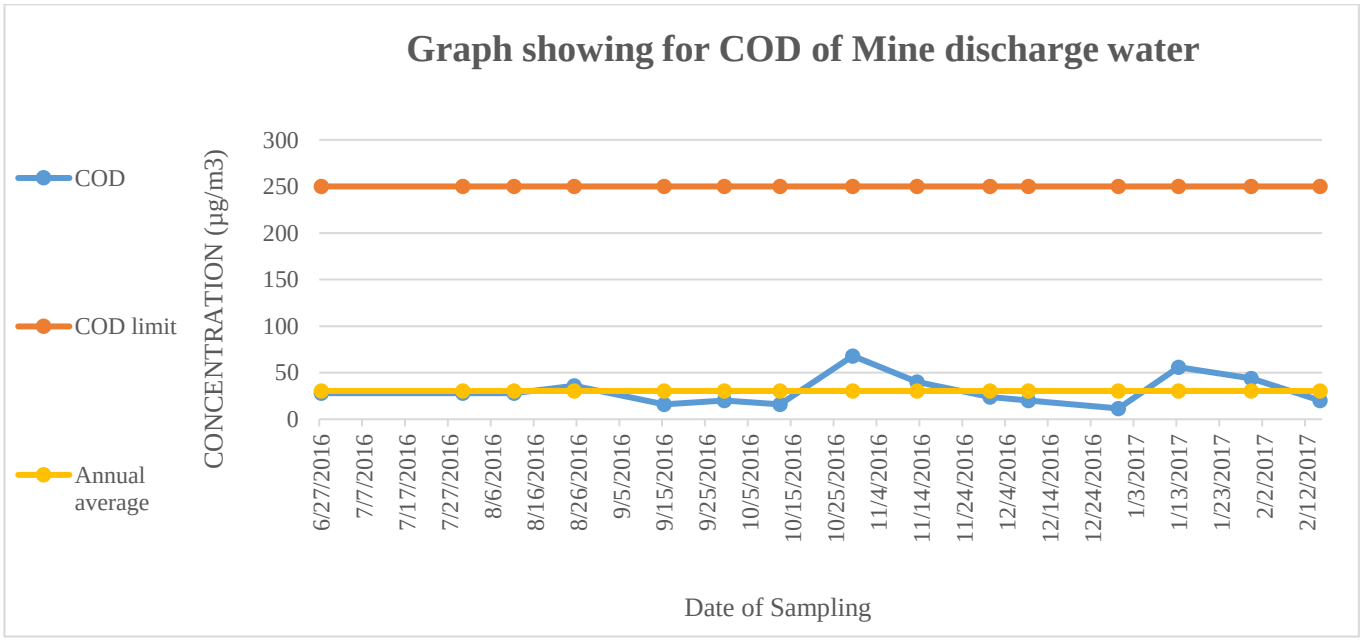
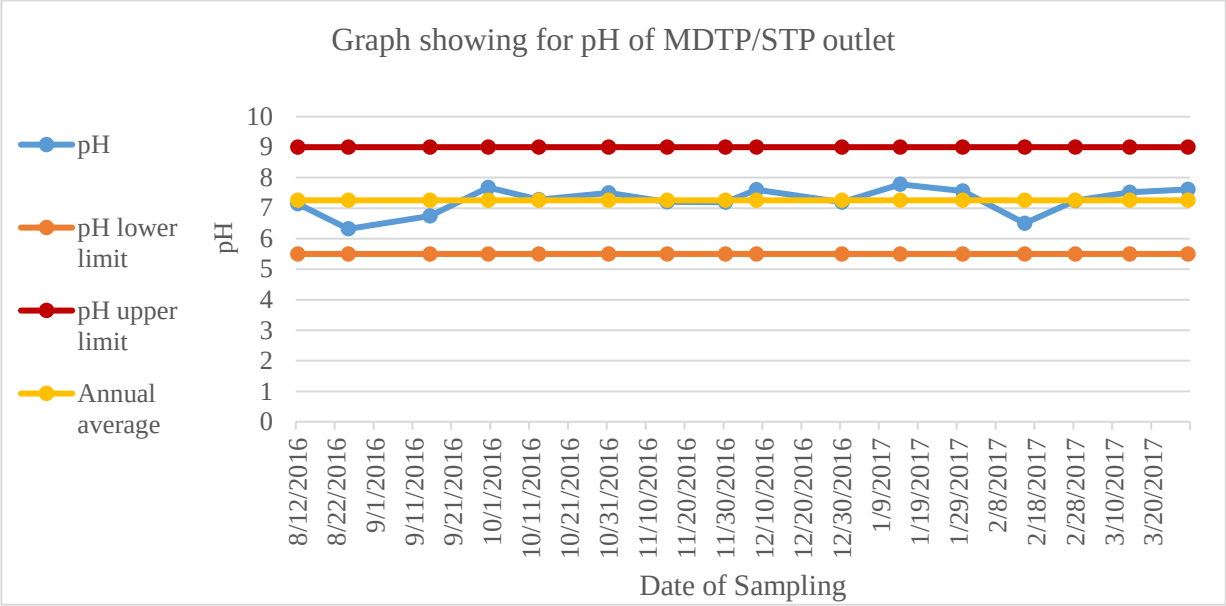
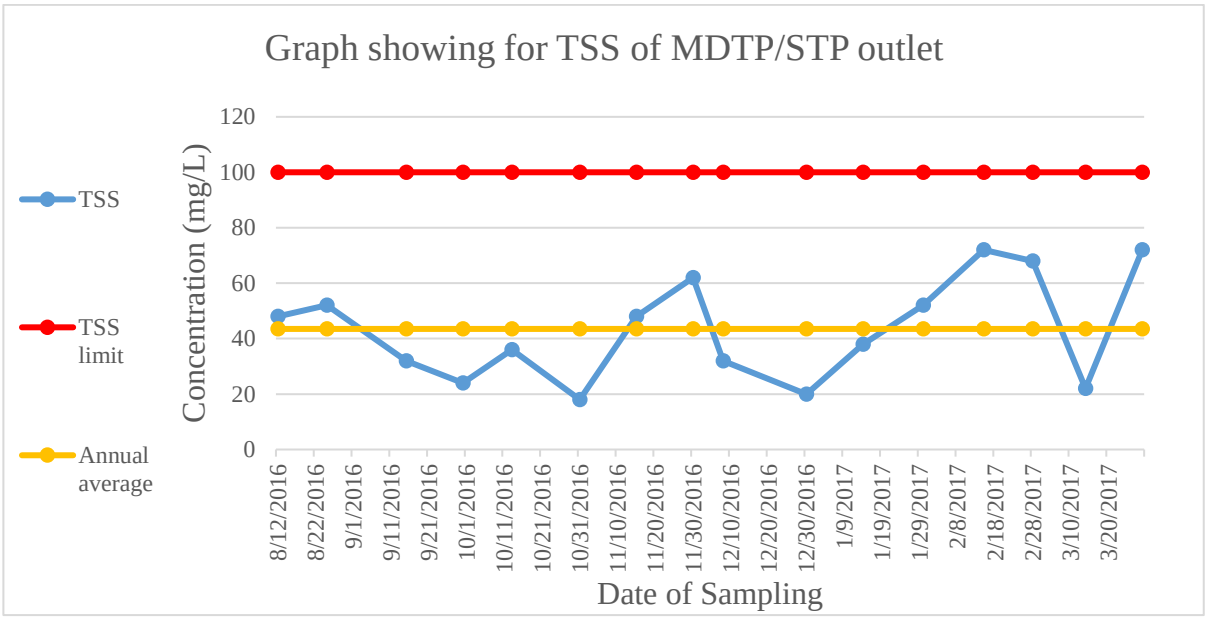

Graph showing for COD of Mine discharge water
COD
COD limit
Annual average
CONCENTRATION (µg/m3)
300
250
200
150
100
50
0
6/27/2016
7/7/2016
7/17/2016
7/27/2016
8/6/2016
8/16/2016
8/26/2016
9/5/2016
9/15/2016
9/25/2016
10/5/2016
10/15/2016
10/25/2016
11/4/2016
11/14/2016
11/24/2016
12/4/2016
12/14/2016
12/24/2016
1/3/2017
1/13/2017
1/23/2017
2/2/2017
2/12/2017
Date of Sampling

Table:94
Project: Jagannath OCP
Monitoring Station: MDTP/STP Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
12-08-2016	7.14	<4.0	48	36
25-08-2016	6.32	<4.0	52	76
15-09-2016	6.75	<4.0	32	28
30-09-2016	7.68	<4.0	24	40
13-10-2016	7.28	<4.0	36	24
31-10-2016	7.5	<4.0	18	16
15-11-2016	7.21	<4.0	48	32
30-11-2016	7.2	<4.0	62	44
08-12-2016	7.6	<4.0	32	24.4
30-12-2016	7.2	<4.0	20	8
14-01-2017	7.78	<4.0	38	24
30-01-2017	7.56	<4.0	52	44
15-02-2017	6.5	<4.0	72	36
28-02-2017	7.25	<4.0	68	56
14-03-2017	7.52	<4.0	22	8
29-03-2017	7.62	<4.0	72	60


Graph showing for pH of MDTP/STP outlet
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling


Graph showing for TSS of MDTP/STP outlet
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

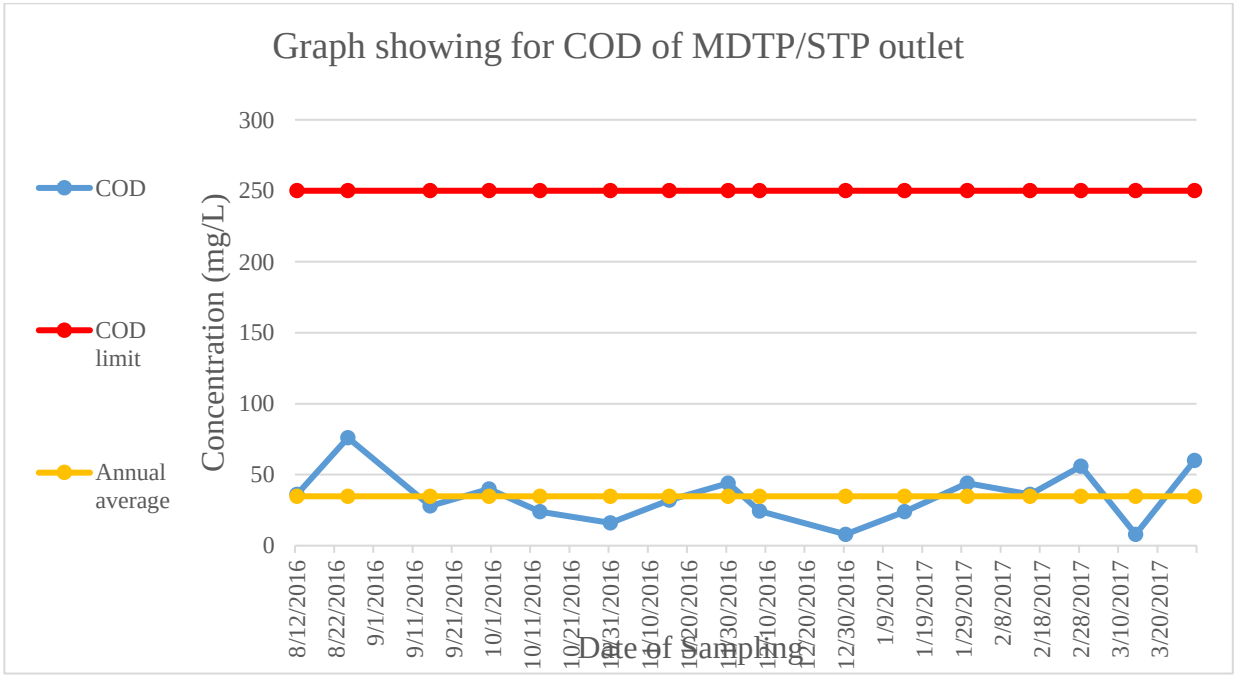
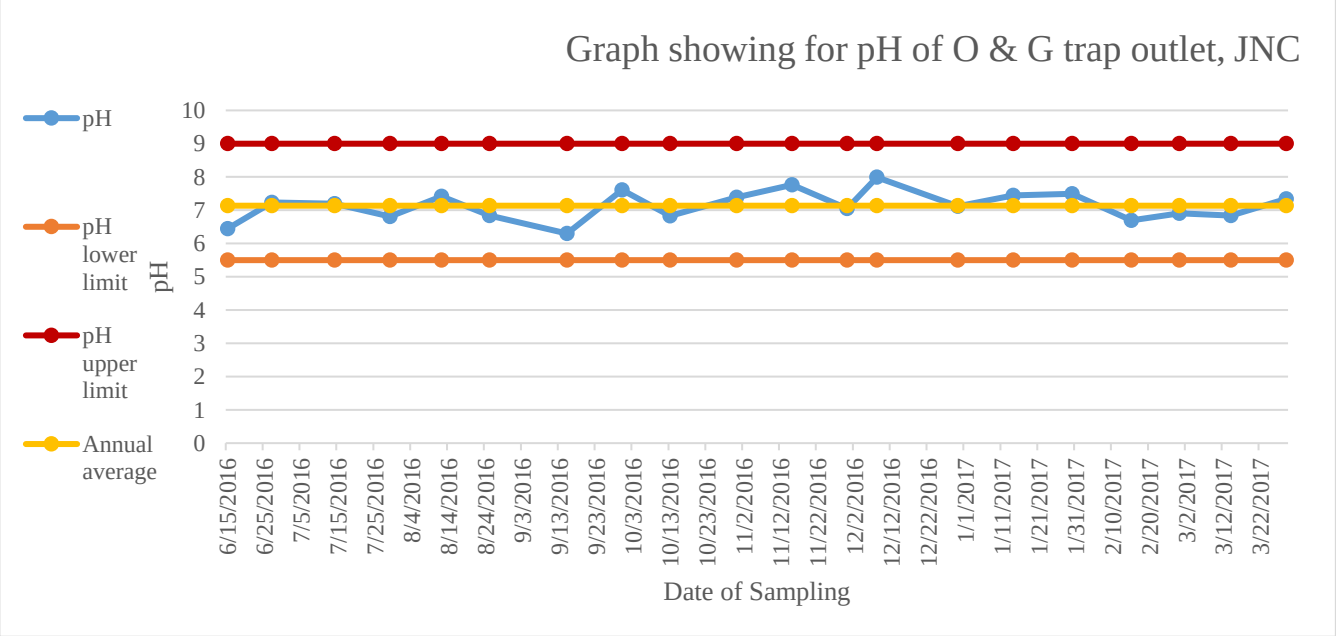

Graph showing for COD of MDTP/STP outlet
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
Date of Sampling

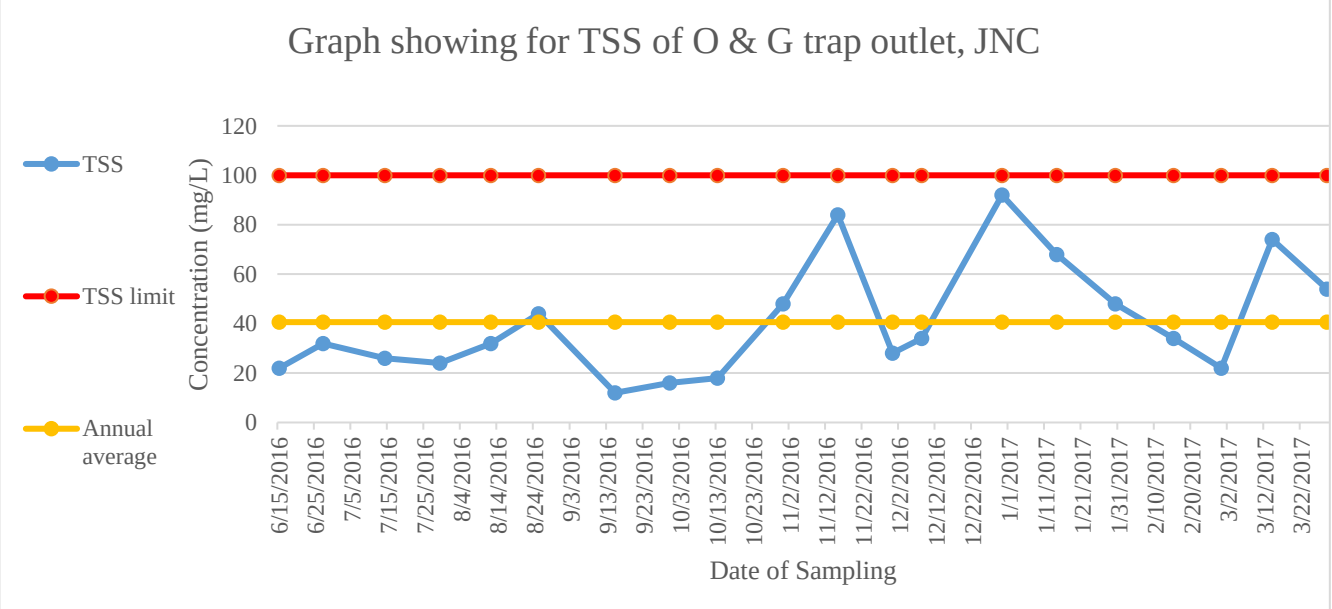
Table:95
Project: Jagannath OCP
Monitoring Station: Mine Discharge water

Date of Sampling	pH	Oil & Grease	TSS	COD
15-06-2016	6.81	<4.0	20	36
27-06-2016	7.14	<4.0	32	44
14-07-2016	7.6	<4.0	20	48
29-07-2016	6.6	<4.0	36	44

Table:96
Project: Jagannath OCP
Monitoring Station: O & G trap outlet, JNC

Date of Sampling	pH	Oil & Grease	TSS	COD
15-06-2016	6.45	<4.0	22	52
27-06-2016	7.23	<4.0	32	72
14-07-2016	7.2	<4.0	26	76
29-07-2016	6.81	<4.0	24	24
12-08-2016	7.42	<4.0	32	48
25-08-2016	6.84	<4.0	44	56
15-09-2016	6.3	<4.0	12	56
30-09-2016	7.61	<4.0	16	56
13-10-2016	6.83	<4.0	18	36
31-10-2016	7.39	<4.0	48	44
15-11-2016	7.76	<4.0	84	72
30-11-2016	7.05	<4.0	28	16
08-12-2016	7.99	<4.0	34	25.2
30-12-2016	7.12	<4.0	92	72
14-01-2017	7.45	<4.0	68	52
30-01-2017	7.49	<4.0	48	12
15-02-2017	6.7	<4.0	34	16
28-02-2017	6.91	<4.0	22	16
14-03-2017	6.84	<4.0	74	68
29-03-2017	7.34	<4.0	54	44


Graph showing for pH of O & G trap outlet, JNC
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
3/22/2017
Date of Sampling


Graph showing for TSS of O & G trap outlet, JNC
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
3/22/2017
Date of Sampling

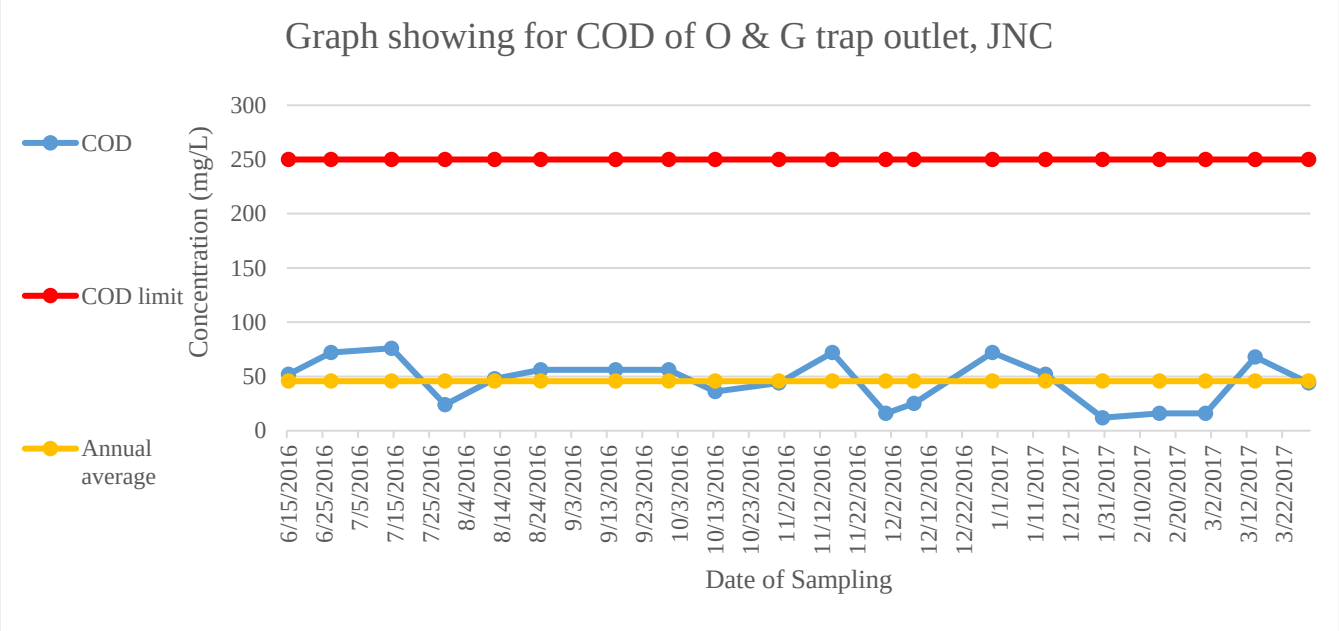

Graph showing for COD of O & G trap outlet, JNC
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
3/22/2017
Date of Sampling

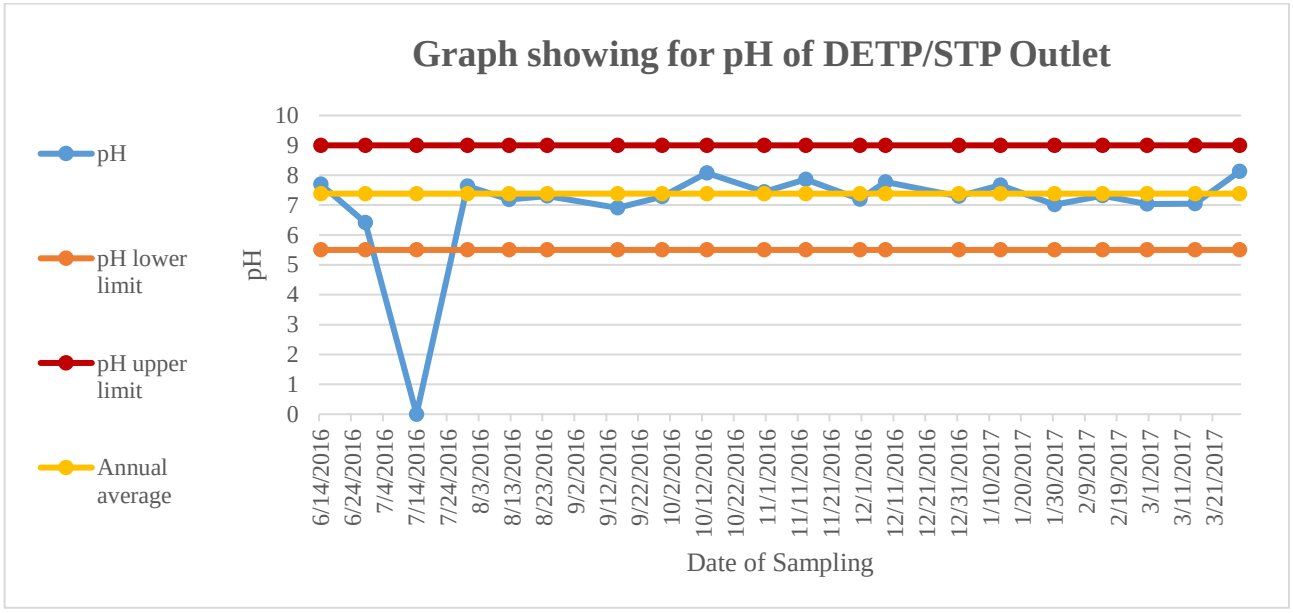
Table:97
Project: Bharatpur OCP
Monitoring Station: DETP/STP Inlet

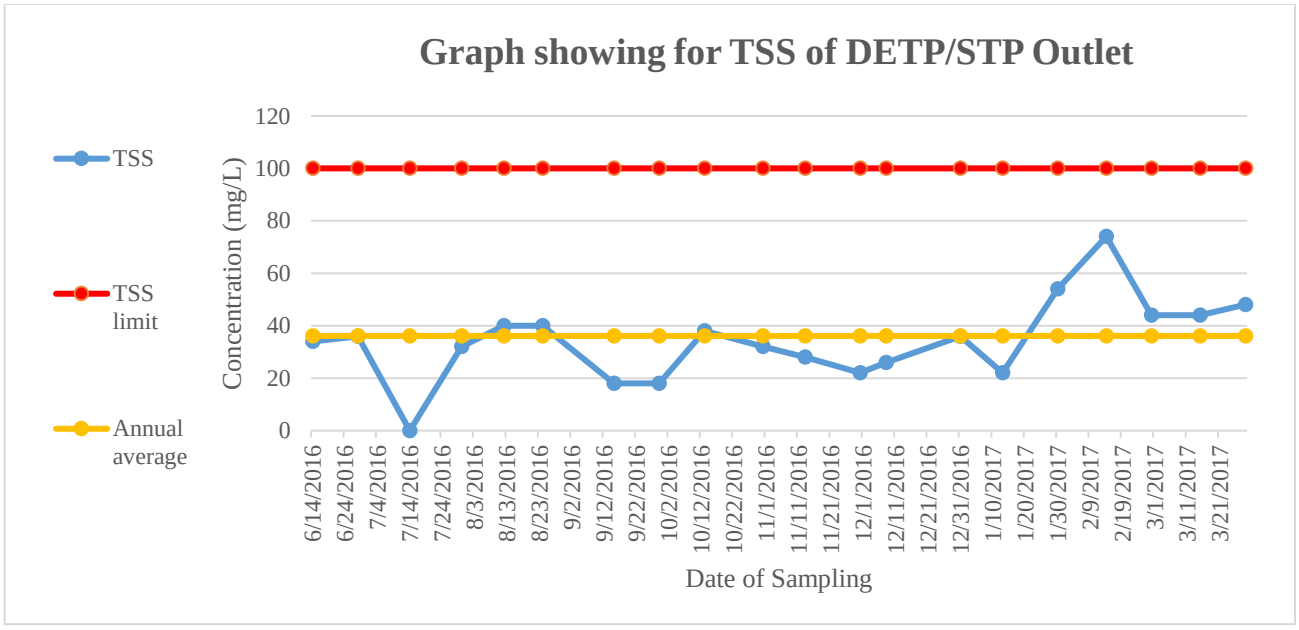
Date of Sampling	pH	TSS	BOD
30-09-2016	6.94	32	5.6
15-03-2017	6.72	36	3.2

Table:98
Project: Bharatpur OCP
Monitoring Station: DETP/STP Outlet

Date of Sampling	pH	TSS	BOD
14-06-2016	7.7	34	52
28-06-2016	6.41	36	6.2
14-07-2016	no discharge		
30-07-2016	7.64	32	6.1
12-08-2016	7.19	40	6.2
24-08-2016	7.3	40	6.3
15-09-2016	6.91	18	6.5
29-09-2016	7.28	18	5.3
13-10-2016	8.08	38	4.3
31-10-2016	7.44	32	3.5
13-11-2016	7.86	28	7.5
30-11-2016	7.2	22	7.1
08-12-2016	7.78	26	6.2
31-12-2016	7.29	36	6.3
13-01-2017	7.67	22	4.1
30-01-2017	7.01	54	2.8
14-02-2017	7.31	74	2.6
28-02-2017	7.04	44	3.1
15-03-2017	7.05	44	2.8
29-03-2017	8.13	48	3.4

All values are in mg/L except pH


Graph showing for pH of DETP/STP Outlet
pH
pH lower limit
pH upper limit
Annual average
pH
Date of Sampling


Graph showing for TSS of DETP/STP Outlet
TSS
TSS limit
Annual average
Concentration (mg/L)
Date of Sampling

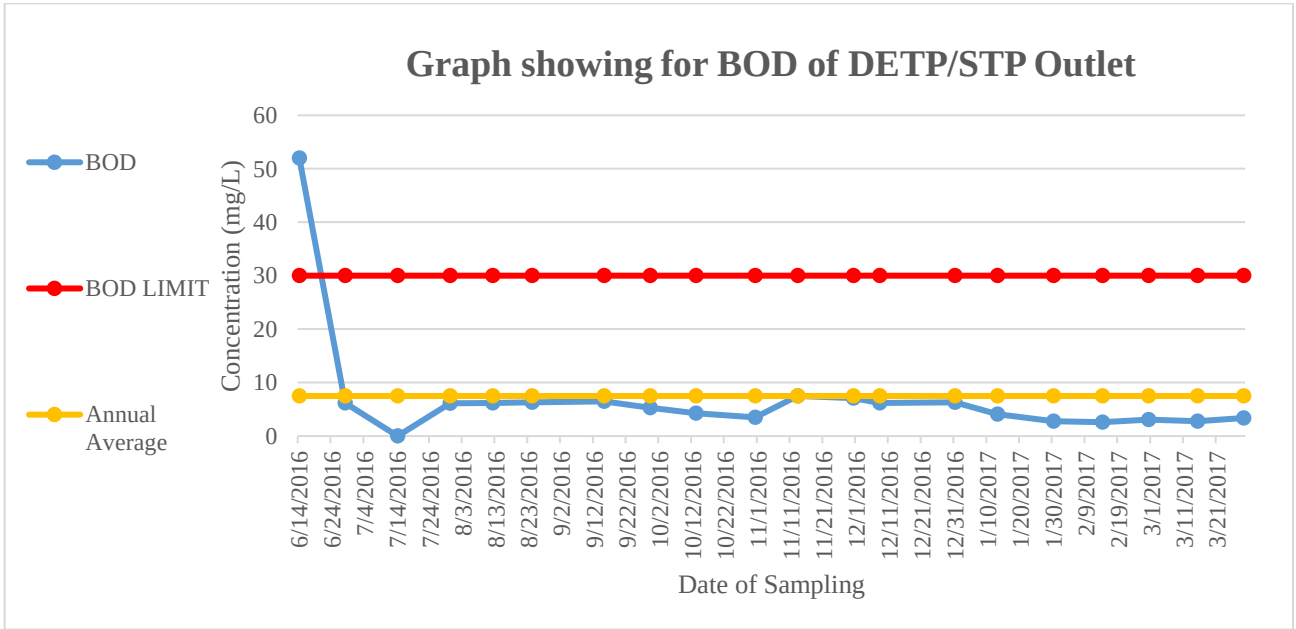

Graph showing for BOD of DETP/STP Outlet
BOD
BOD LIMIT
Annual Average
Concentration (mg/L)
Date of Sampling

Table:99
Project: Bharatpur OCP
Monitoring Station: Mine discharge water at point of confluence with Bangaru Nulla

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	No discharge			
28-06-2016	No discharge			
14-07-2016	No discharge			
30-07-2016	7.05	<4.0	16	88
12-08-2016	No Discharge			
24-08-2016	6.8	<4.0	28	48
15-09-2016	7.05	<4.0	26	104
30-09-2016	7.47	<4.0	62	44
15-10-2016	No discharge			
31-10-2016	No discharge			
15-02-2017	No discharge			
28-02-2017	No discharge			
14-03-2017	No discharge			
29-03-2017	No discharge			

Table: 100
Project: Bharatpur OCP
Monitoring Station: O&G trap outlet

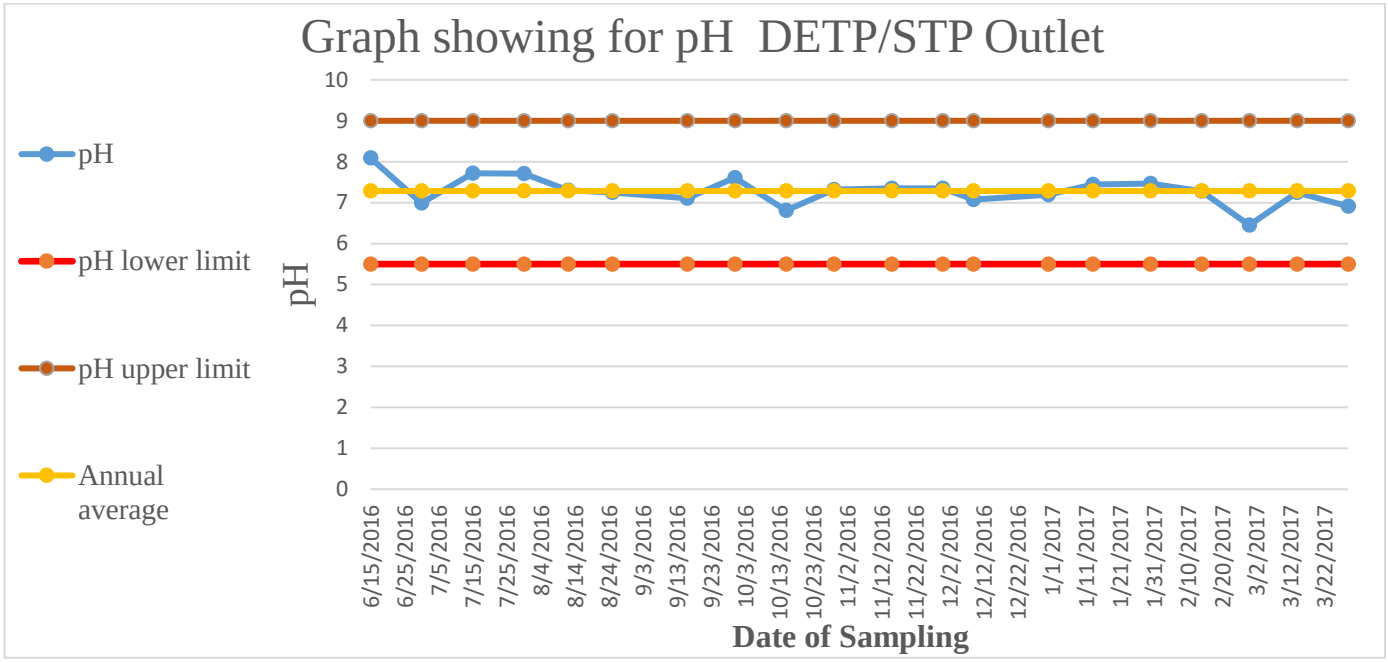
Date of Sampling	pH	Oil & Grease	TSS	COD
14-03-2017	7.63	<4.0	36	28
14-06-2016	7.31	<4.0	16	48
29-09-2016	7.72	<4.0	20	76
08-12-2016	7.73	<4.0	38	23.6

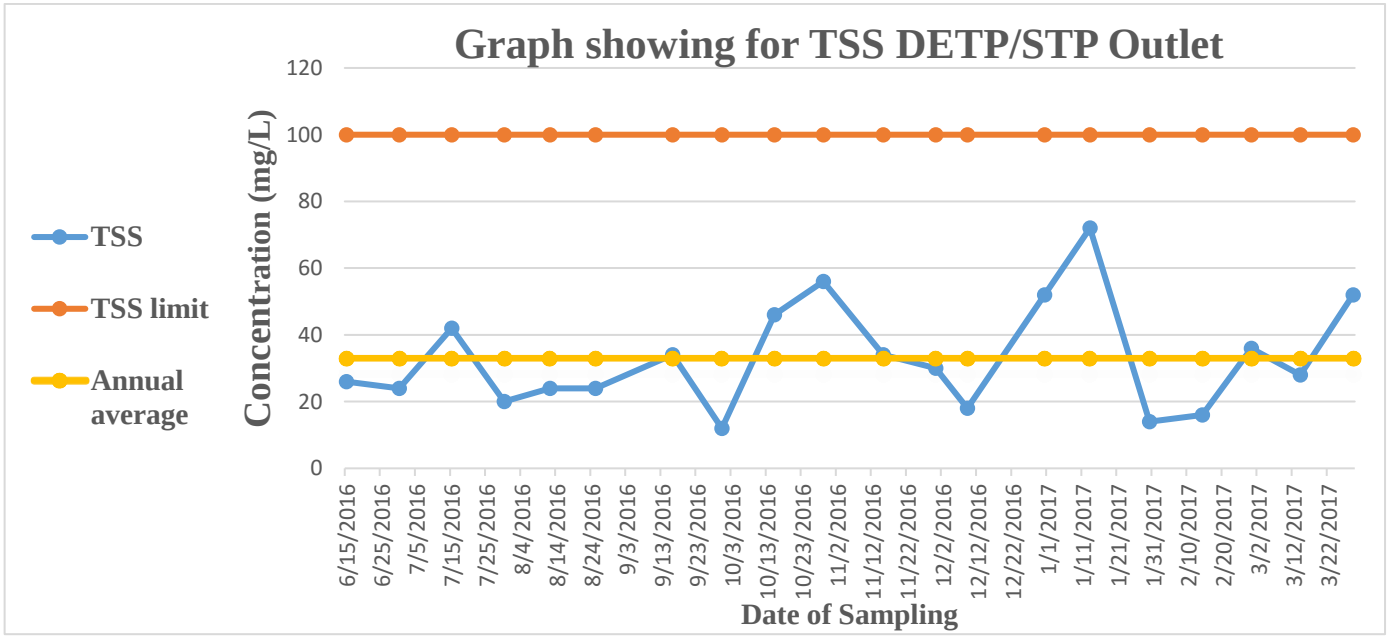
Table: 101

Project: Ananta OCP

Monitoring Station: DETP / STP outlet

Date of Sampling	pH	TSS	BOD
15-06-2016	8.09	26	6.3
30-06-2016	6.99	24	7.5
15-07-2016	7.72	42	8
30-07-2016	7.71	20	7.3
12-08-2016	7.3	24	5.3
25-08-2016	7.25	24	5.5
16-09-2016	7.11	34	7.1
30-09-2016	7.61	12	4.9
15-10-2016	6.81	46	5.5
29-10-2016	7.32	56	4.9
15-11-2016	7.35	34	8.1
30-11-2016	7.35	30	8.3
09-12-2016	7.08	18	7.3
31-12-2016	7.19	52	5.8
13-01-2017	7.44	72	2.9
30-01-2017	7.47	14	3.5
14-02-2017	7.28	16	2.9
28-02-2017	6.45	36	2.8
14-03-2017	7.25	28	3.4
29-03-2017	6.91	52	3.2


Graph showing for pH DETP/STP Outlet
pH
pH lower limit
pH upper limit
Annual average
pH
Date of Sampling


Graph showing for TSS DETP/STP Outlet
TSS
TSS limit
Annual average
Concentration (mg/L)
Date of Sampling

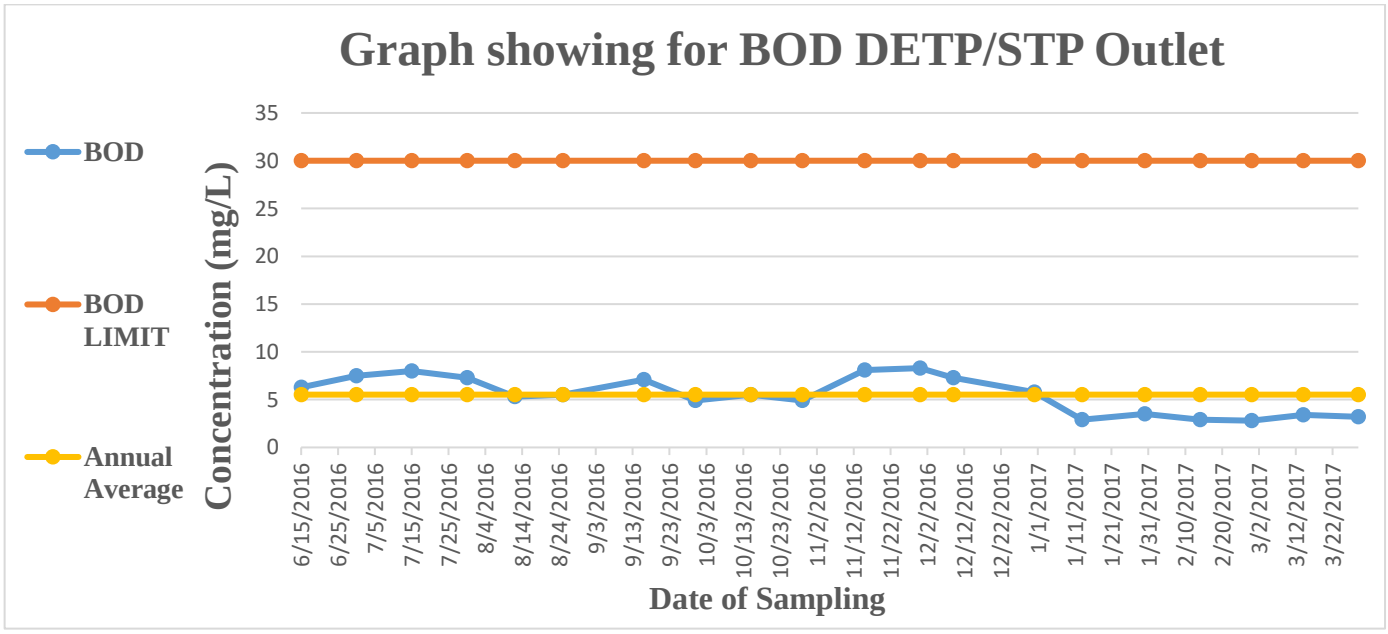

Graph showing for BOD DETP/STP Outlet
BOD
BOD LIMIT
Annual Average
Concentration (mg/L)
Date of Sampling

Table:102
Project: Ananta OCP
Monitoring Station: DETP / STP intlet

Date of Sampling	pH	TSS	BOD
30-09-2016	7.1	16	6.1
14-03-2017	7.1	66	3.1

Table:103
Project: Ananta OCP
Monitoring Station: Mine sump water

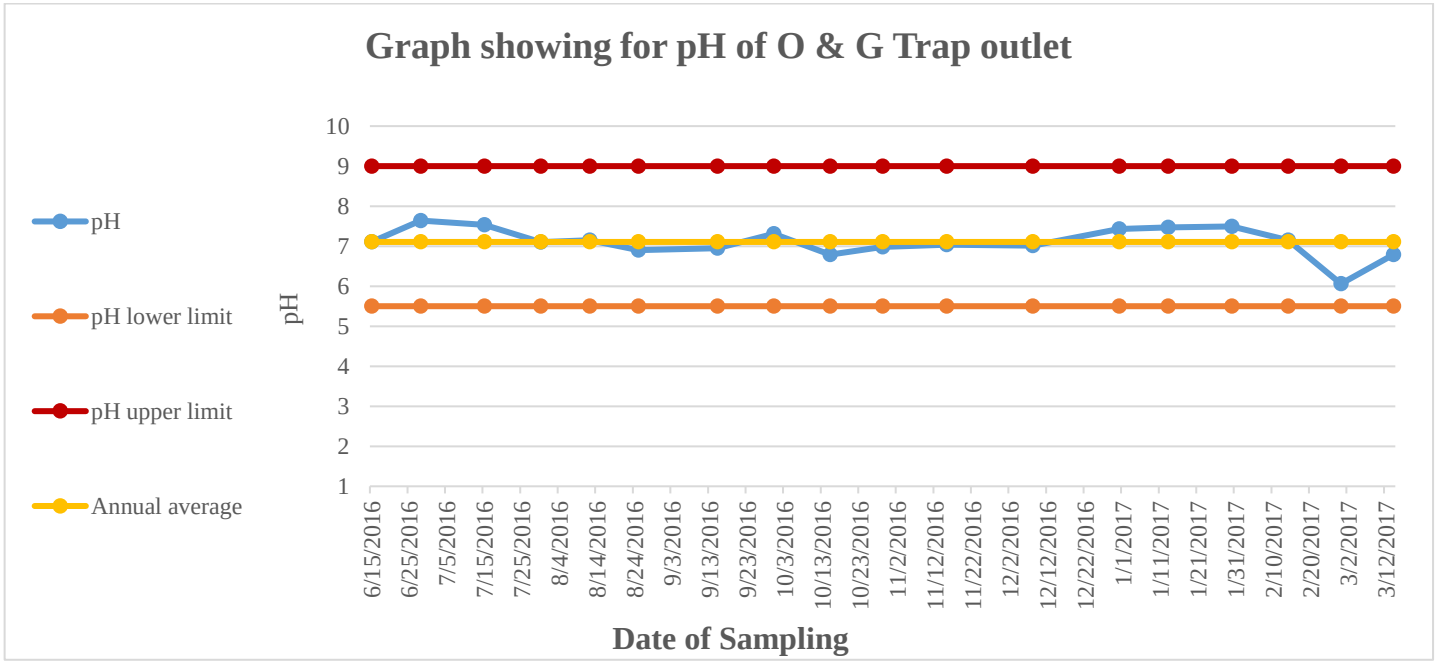
Date of Sampling	pH
15-12-2016	6.91
14-03-2017	7.01
15-06-2016	6.86

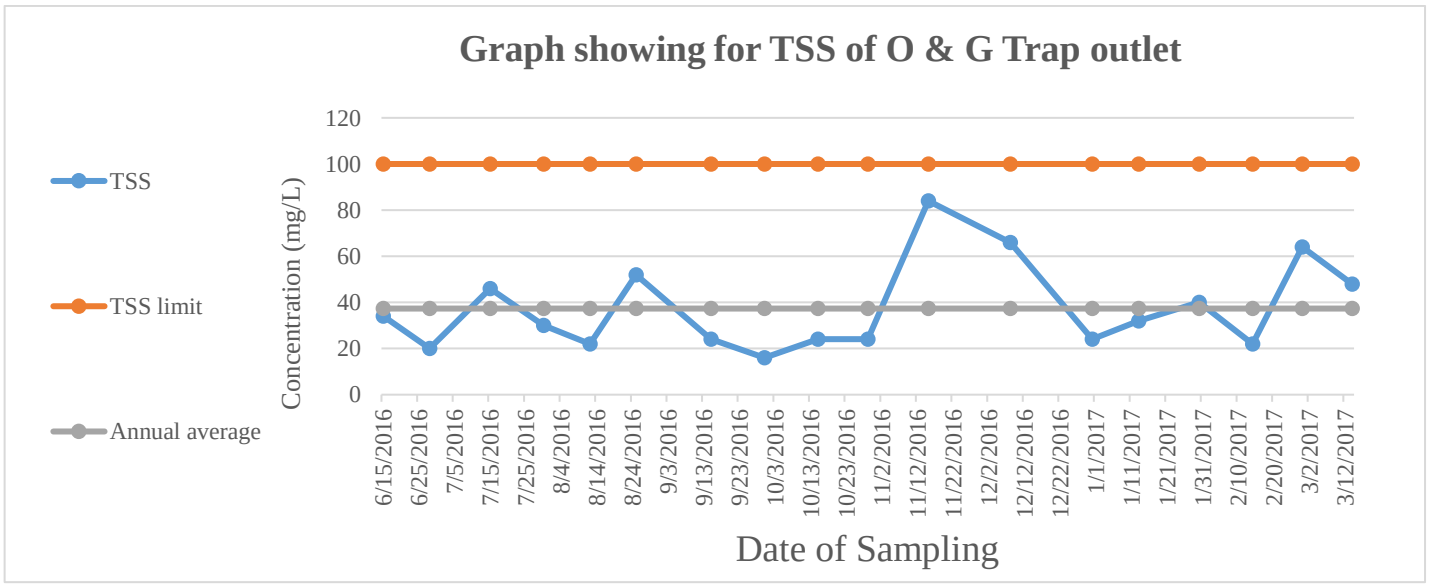
Table: 104
Project: Ananta OCP
Monitoring Station: O & G Trap Inlet

Date of Sampling	pH	Oil & Grease	TSS	COD
29-09-2016	7.09	<4.0	30	94
14-03-2017	6.79	<4.0	48	36

Table:105
Project: Ananta OCP
Monitoring Station: O & G Trap Outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
15-06-2016	7.11	<4.0	34	68
28-06-2016	7.64	<4.0	20	76
15-07-2016	7.53	<4.0	46	52
30-07-2016	7.1	<4.0	30	48
12-08-2016	7.15	<4.0	22	64
25-08-2016	6.9	<4.0	52	72
15-09-2016	6.95	<4.0	24	64
30-09-2016	7.31	<4.0	16	24
15-10-2016	6.79	<4.0	24	44
29-10-2016	6.98	<4.0	24	48
15-11-2016	7.04	<4.0	84	116
08-12-2016	7.01	<4.0	66	52
31-12-2016	7.43	<4.0	24	9.2
13-01-2017	7.47	<4.0	32	16
30-01-2017	7.49	<4.0	40	36
14-02-2017	7.15	<4.0	22	12
28-02-2017	6.06	<4.0	64	40
14-03-2017	6.79	<4.0	48	36


Graph showing for pH of O & G Trap outlet
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling


Graph showing for TSS of O & G Trap outlet
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling

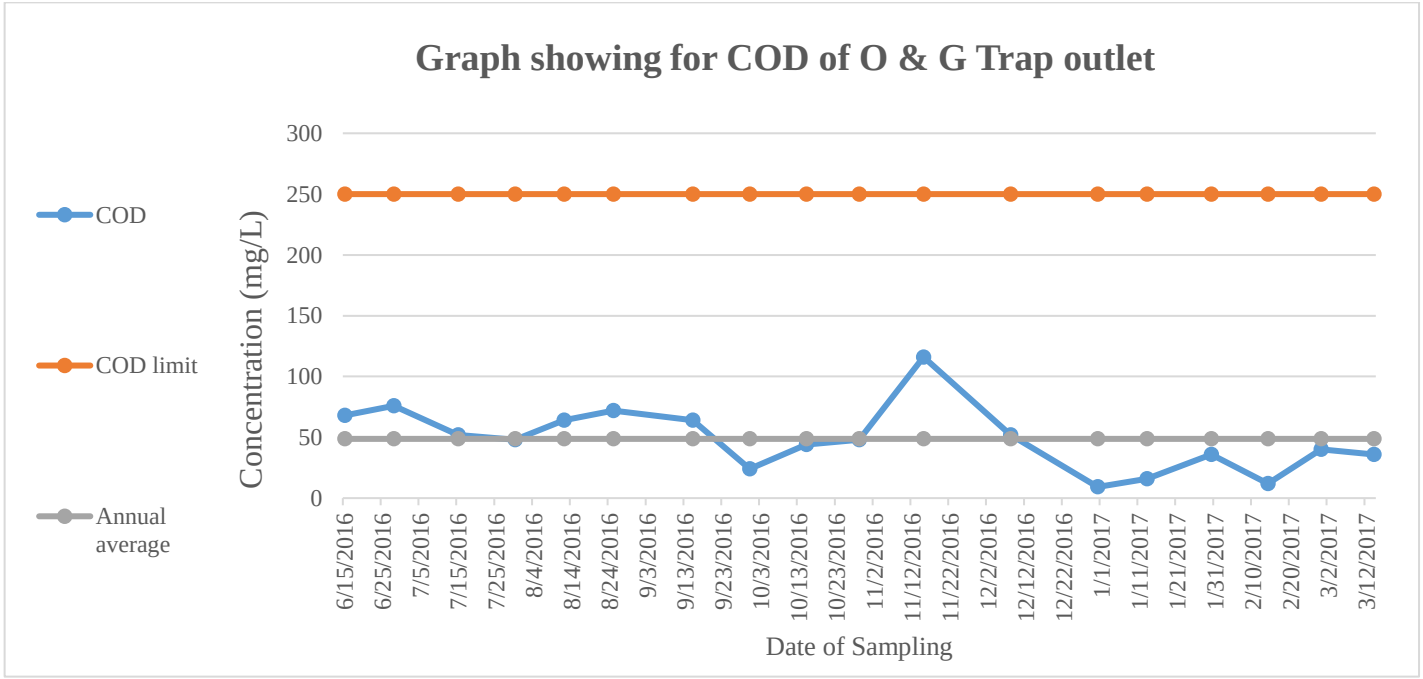
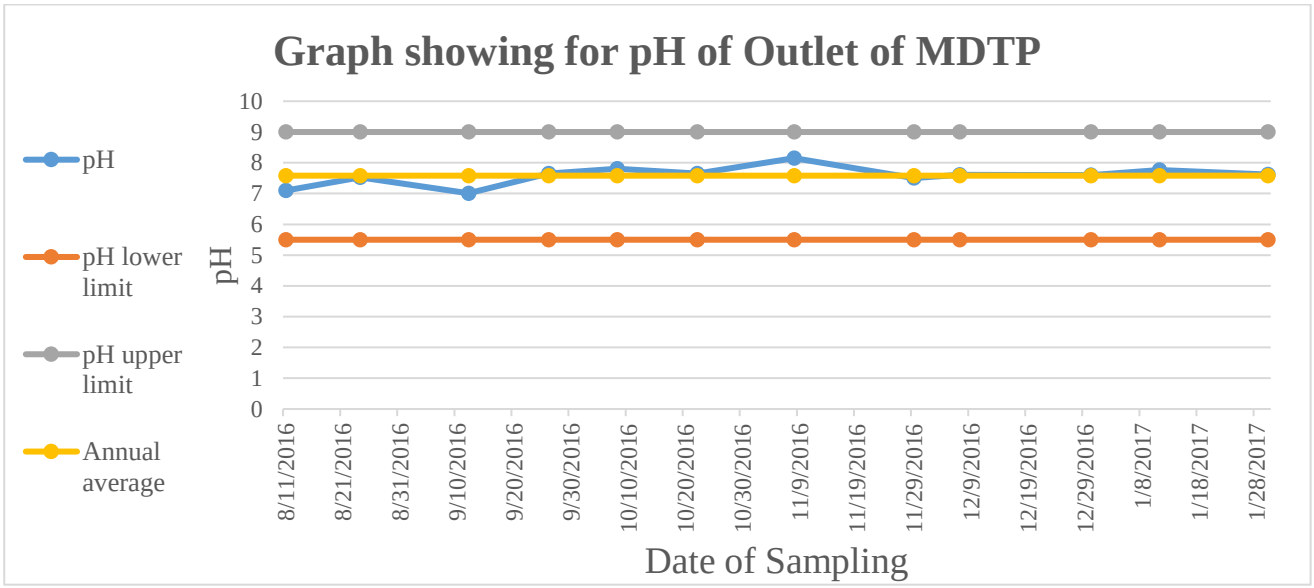

Graph showing for COD of O & G Trap outlet
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
Date of Sampling

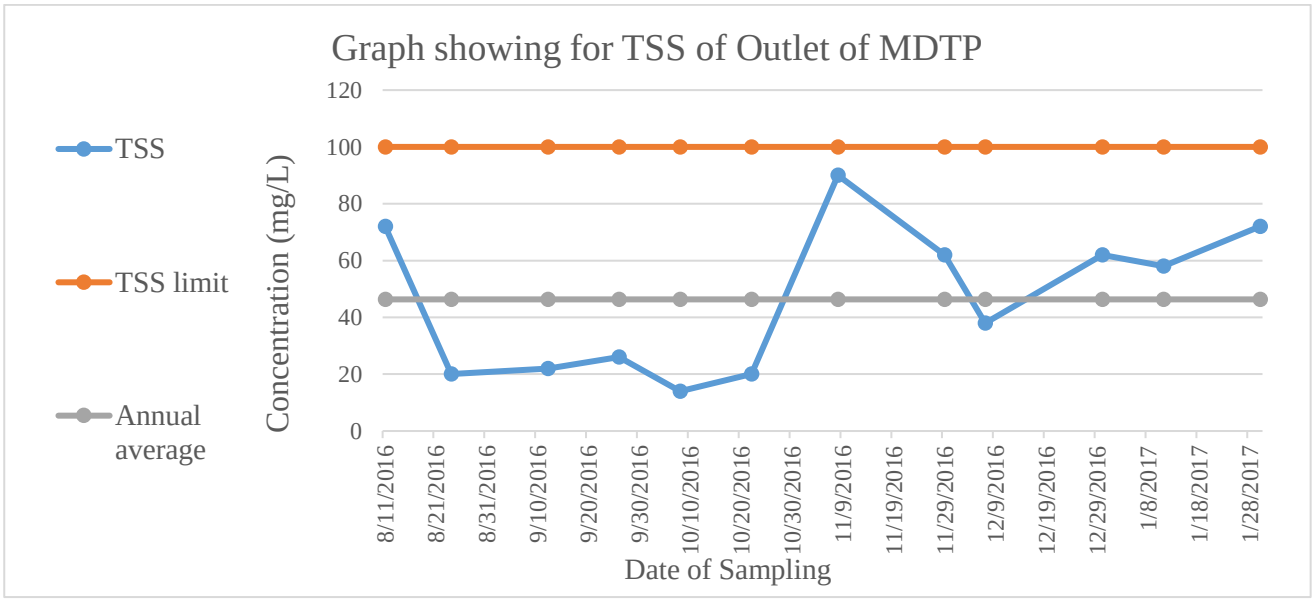
Table:106
Project: Ananta OCP
Monitoring Station: O & G Trap Outlet (Half yearly)

Date of Sampling	pH	Oil & Grease	TSS	COD
14-03-2017	6.83	<4.0	32	12
29-03-2017	6.7	<4.0	88	160

Table: 107
Project: Kaniha OCP
Monitoring Station: Outlet of MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
11-08-2016	7.1	<4.0	72	184
24-08-2016	7.52	<4.0	20	44
12-09-2016	7.01	<4.0	22	84
26-09-2016	7.65	<4.0	26	56
08-10-2016	7.81	<4.0	14	20
22-10-2016	7.65	<4.0	20	16
08-11-2016	8.15	<4.0	90	80
29-11-2016	7.5	<4.0	62	28
07-12-2016	7.61	<4.0	38	15.6
30-12-2016	7.6	<4.0	62	37.2
11-01-2017	7.76	<4.0	58	40
30-01-2017	7.62	<4.0	72	84


Graph showing for pH of Outlet of MDTP
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
Date of Sampling


Graph showing for TSS of Outlet of MDTP
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
Date of Sampling

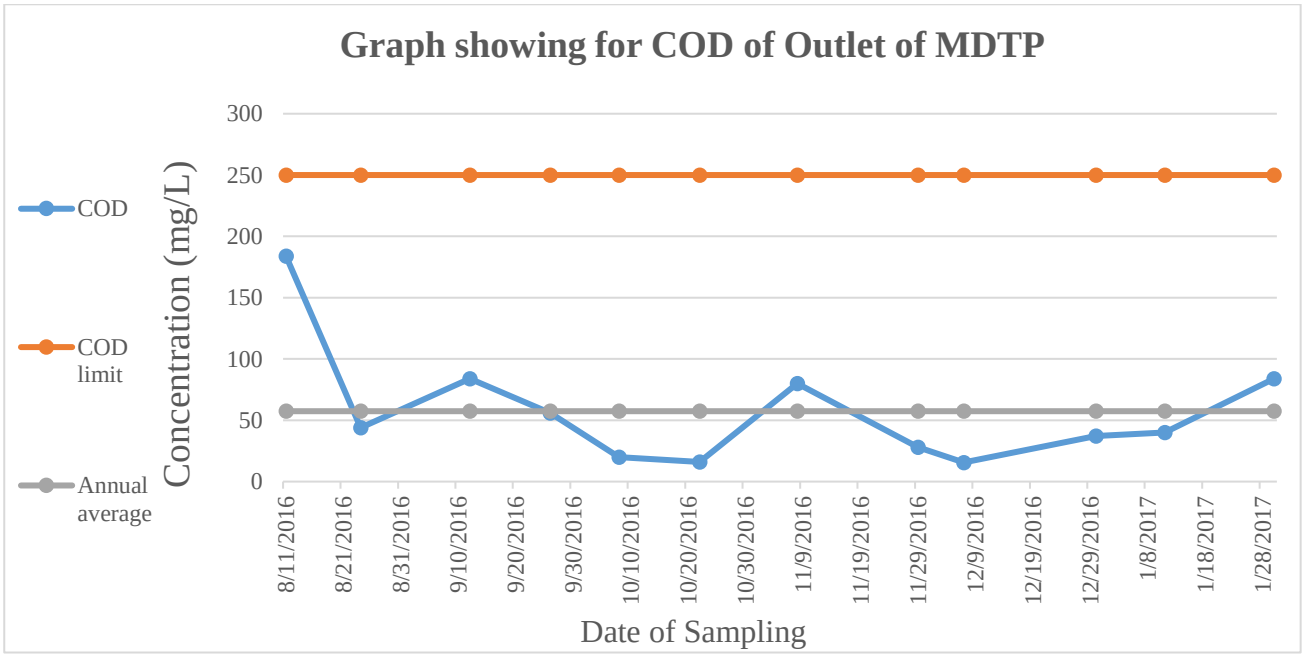
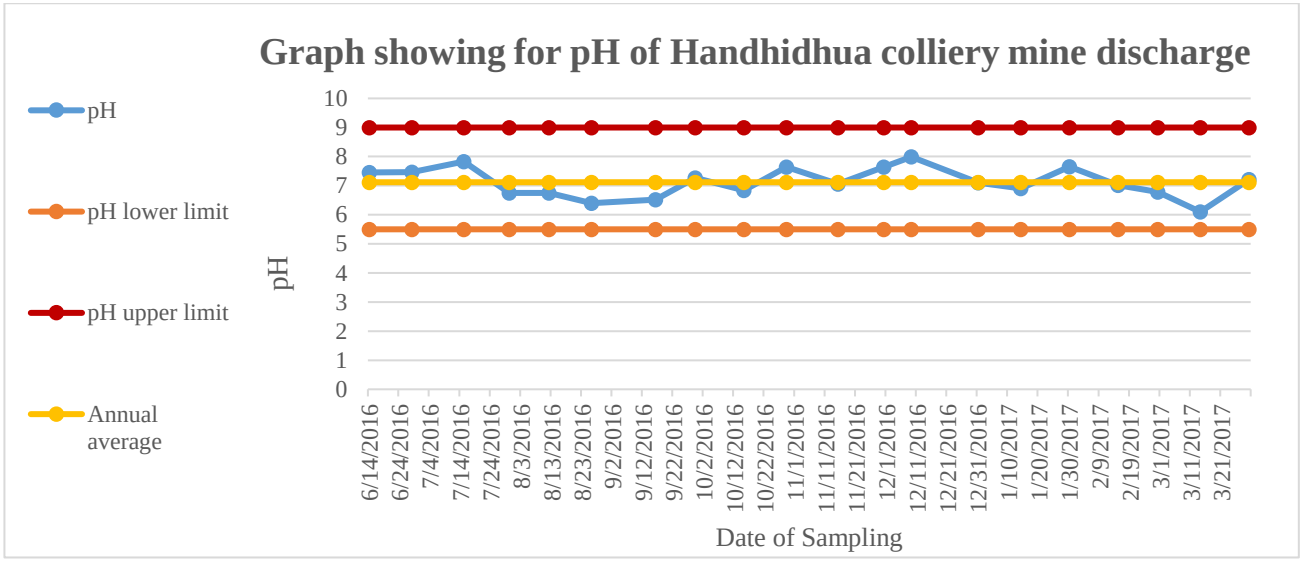
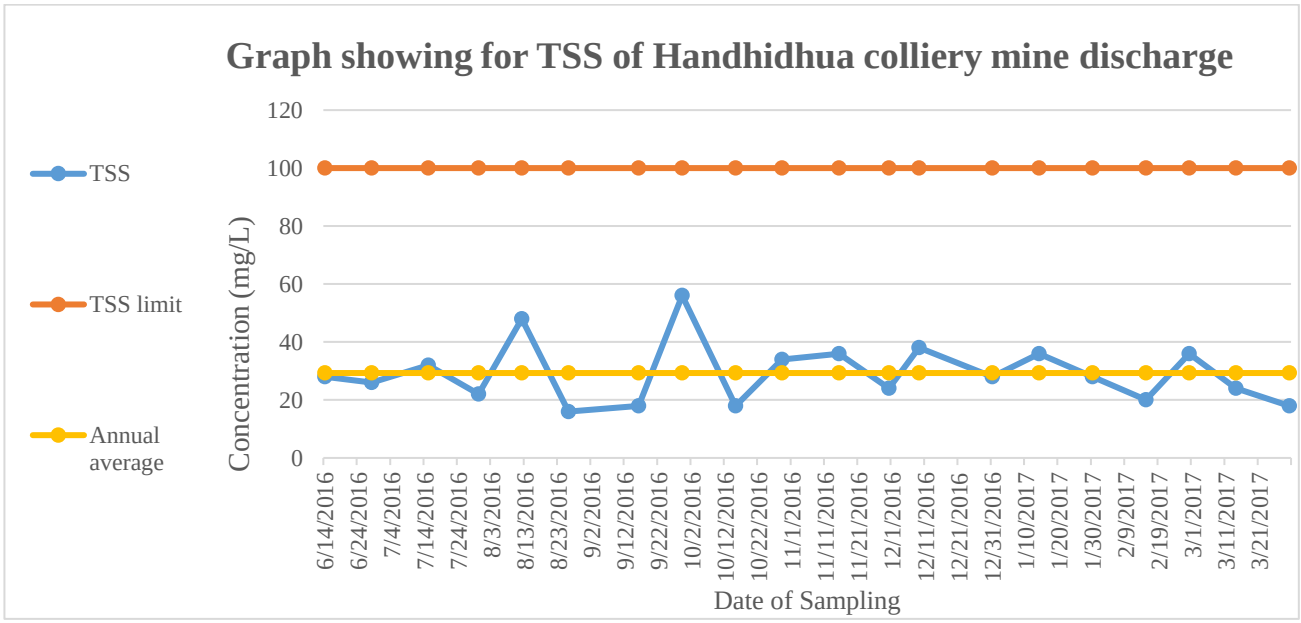

Graph showing for COD of Outlet of MDTP
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
8/11/2016
8/21/2016
8/31/2016
9/10/2016
9/20/2016
9/30/2016
10/10/2016
10/20/2016
10/30/2016
11/9/2016
11/19/2016
11/29/2016
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
Date of Sampling

Table:108
Project: Talcher U/G
Monitoring Station: Handhidhua Colliery mine discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	7.45	<4.0	28	32
28-06-2016	7.47	<4.0	26	28
15-07-2016	7.83	<4.0	32	20
30-07-2016	6.75	<4.0	22	72
12-08-2016	6.75	<4.0	48	16
26-08-2016	6.4	<4.0	16	28
16-09-2016	6.52	<4.0	18	40
29-09-2016	7.27	<4.0	56	16
15-10-2016	6.84	<4.0	18	24
29-10-2016	7.64	<4.0	34	52
15-11-2016	7.06	<4.0	36	20
30-11-2016	7.64	<4.0	24	16
09-12-2016	7.99	<4.0	38	11.6
31-12-2016	7.1	<4.0	28	15.6
14-01-2017	6.91	<4.0	36	24
15-02-2017	7.01	<4.0	20	12
28-02-2017	6.78	<4.0	36	24
14-03-2017	6.1	<4.0	24	16
30-03-2017	7.21	<4.0	18	8
30-01-2017	7.65	<4.0	28	24


Graph showing for pH of Handhidhua colliery mine discharge
pH
pH lower limit
pH upper limit
Annual average
pH
Date of Sampling


Graph showing for TSS of Handhidhua colliery mine discharge
TSS
TSS limit
Annual average
Concentration (mg/L)
Date of Sampling

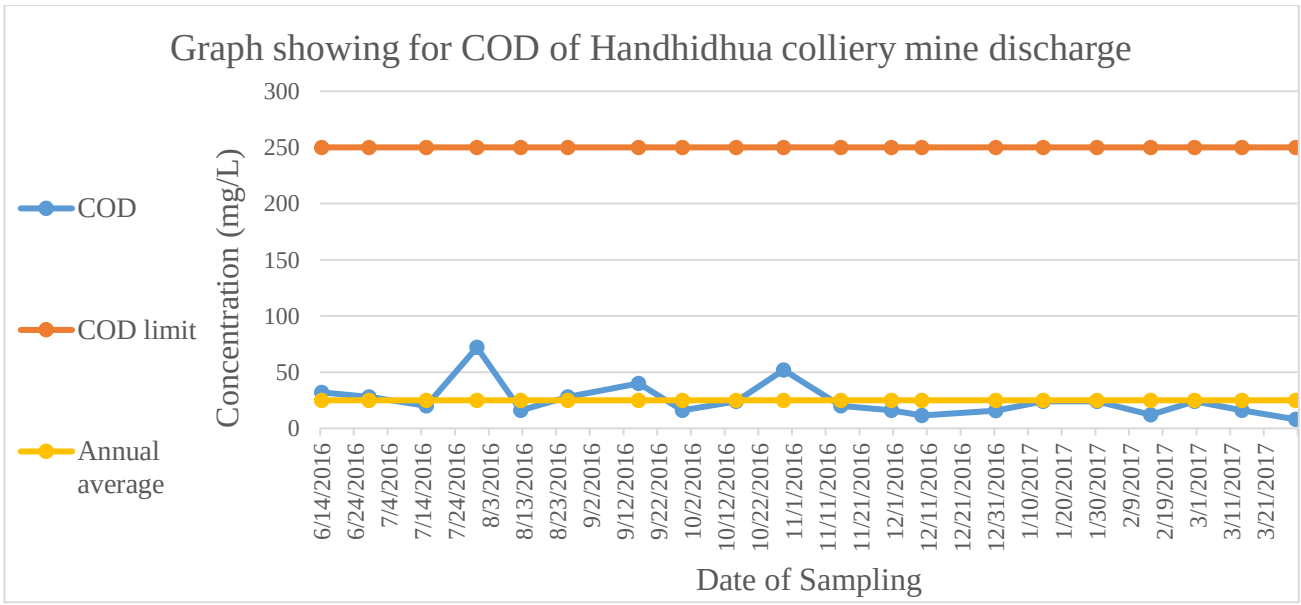
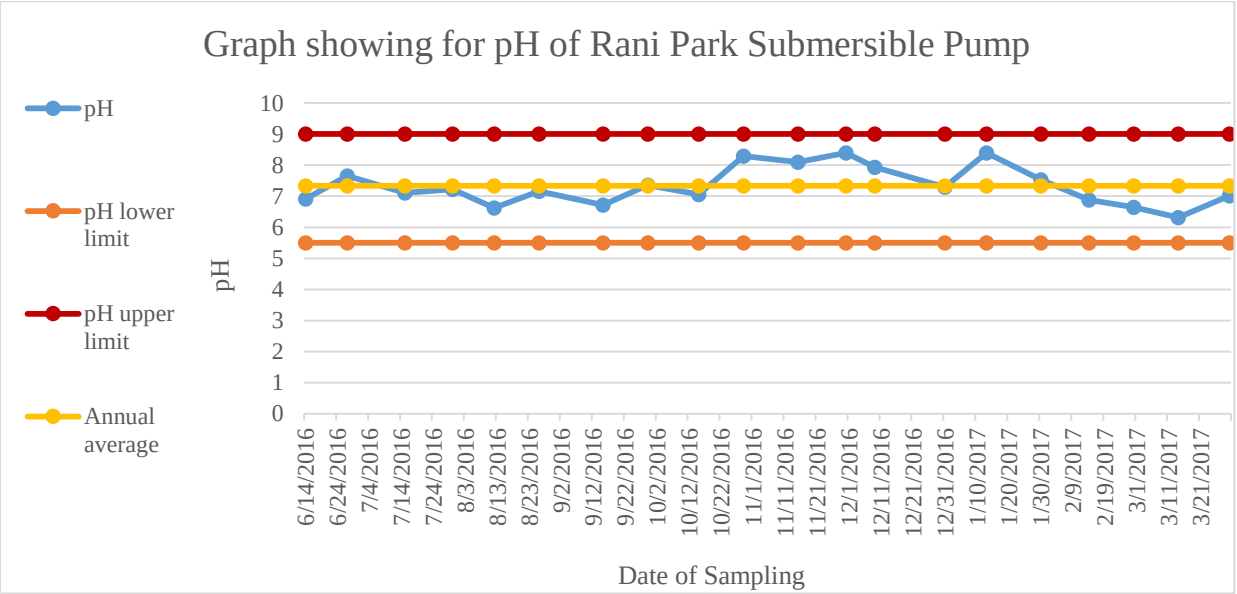

Graph showing for COD of Handhidhua colliery mine discharge
COD
COD limit
Annual average
Concentration (mg/L)
Date of Sampling

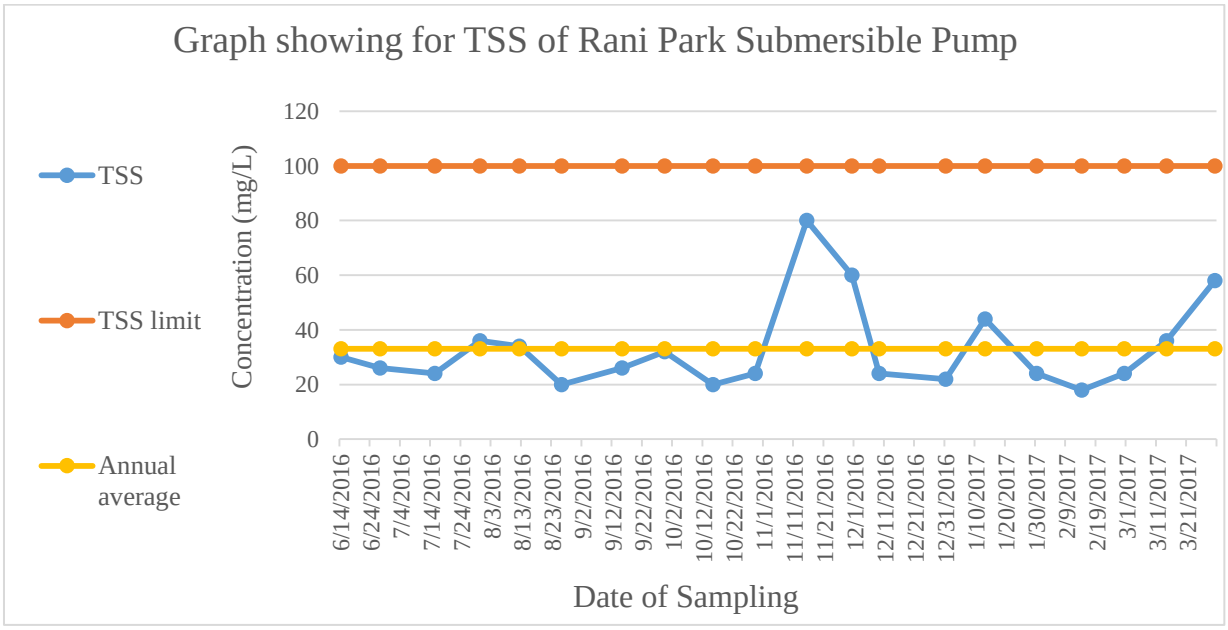
Table:109
Project: Talcher Colliery U/G
Monitoring Station: Mine discharge water

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	6.45	<4.0	22	36
28-06-2016	6.35	<4.0	28	36
15-07-2016	7.95	<4.0	26	28
30-07-2016	6.22	<4.0	48	24

Table:110
Project: Talcher Colliery U/G
Monitoring Station: Rani Park Submersible Pump

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	6.91	<4.0	30	28
27-06-2016	7.65	<4.0	26	52
15-07-2016	7.11	<4.0	24	48
30-07-2016	7.22	<4.0	36	20
12-08-2016	6.62	<4.0	34	20
26-08-2016	7.16	<4.0	20	44
15-09-2016	6.72	<4.0	26	32
29-09-2016	7.35	<4.0	32	48
15-10-2016	7.06	<4.0	20	16
29-10-2016	8.29	<4.0	24	28
15-11-2016	8.1	<4.0	80	68
30-11-2016	8.4	<4.0	60	48
09-12-2016	7.93	<4.0	24	8.8
31-12-2016	7.29	<4.0	22	8
13-01-2017	8.4	<4.0	44	32
30-01-2017	7.53	<4.0	24	16
14-02-2017	6.88	<4.0	18	12
28-02-2017	6.64	<4.0	24	20
14-03-2017	6.31	<4.0	36	28
30-03-2017	7.02	<4.0	58	60


Graph showing for pH of Rani Park Submersible Pump
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling


Graph showing for TSS of Rani Park Submersible Pump
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

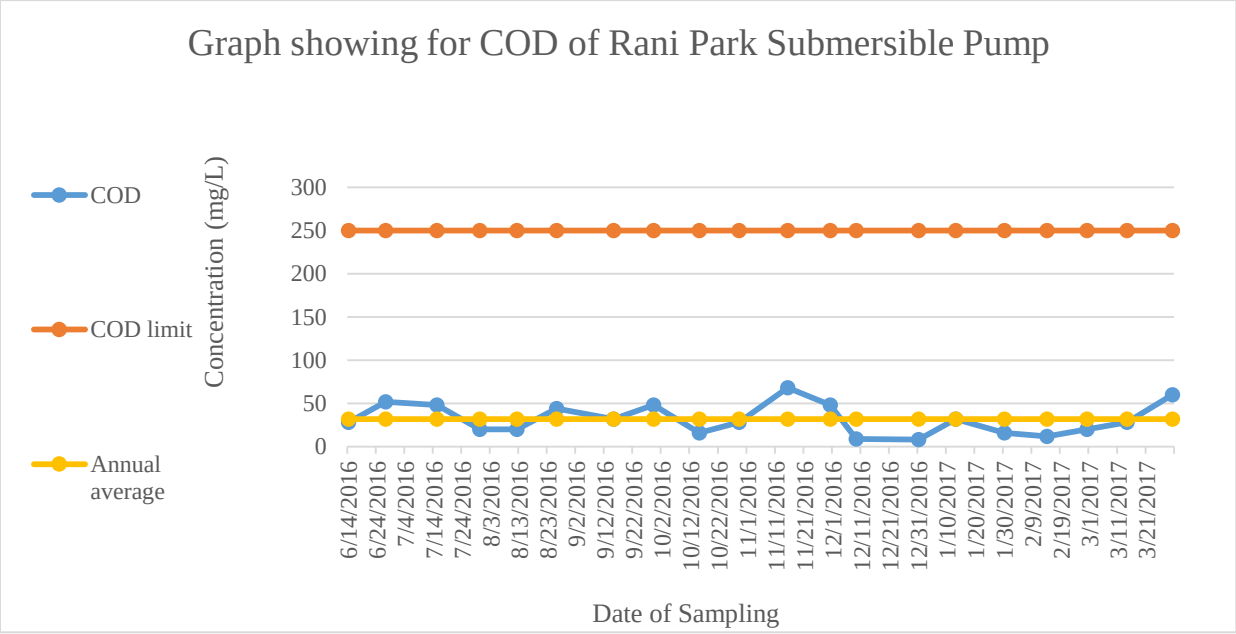
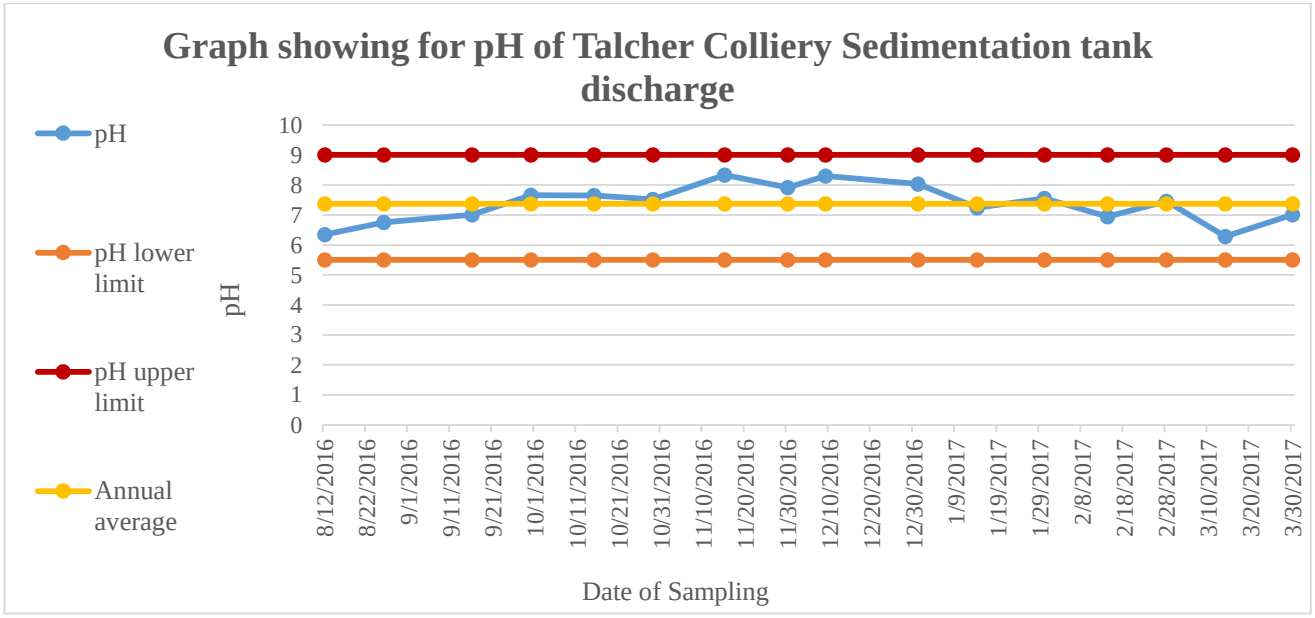
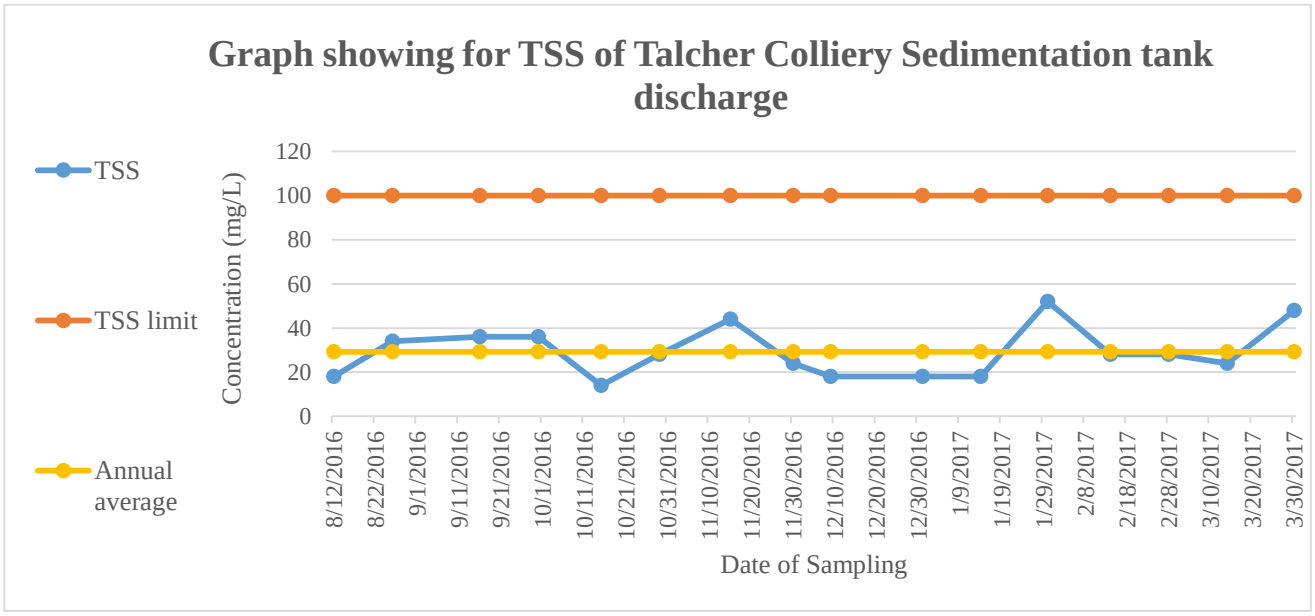

Graph showing for COD of Rani Park Submersible Pump
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

Table:111
Project: Talcher Colliery U/G
Monitoring Station: Talcher Colliery sedimentation tank Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
12-08-2016	6.35	<4.0	18	36
26-08-2016	6.75	<4.0	34	52
16-09-2016	7.01	<4.0	36	44
30-09-2016	7.66	<4.0	36	52
15-10-2016	7.65	<4.0	14	20
29-10-2016	7.52	<4.0	28	20
15-11-2016	8.33	<4.0	44	36
30-11-2016	7.92	<4.0	24	16
09-12-2016	8.3	<4.0	18	8.8
31-12-2016	8.03	<4.0	18	8
14-01-2017	7.24	<4.0	18	12
30-01-2017	7.55	<4.0	52	16
14-02-2017	6.94	<4.0	28	16
28-02-2017	7.46	<4.0	28	12
14-03-2017	6.28	<4.0	24	16
30-03-2017	7.01	<4.0	48	36


Graph showing for pH of Talcher Colliery Sedimentation tank discharge
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
3/30/2017
Date of Sampling


Graph showing for TSS of Talcher Colliery Sedimentation tank discharge
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
3/30/2017
Date of Sampling

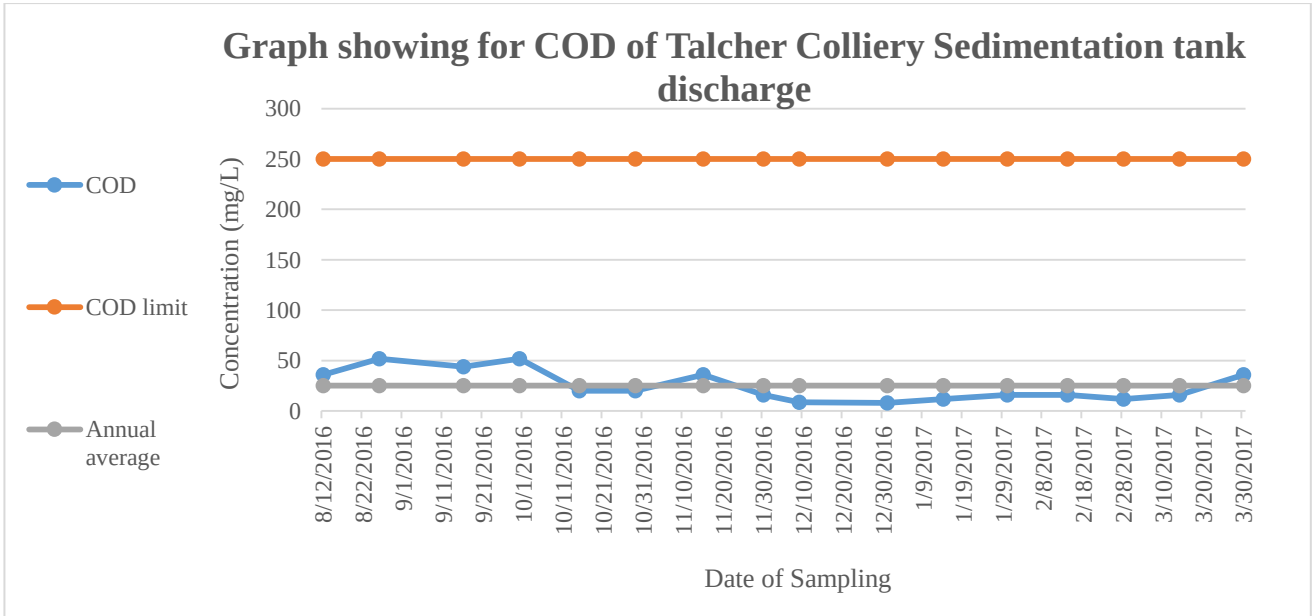
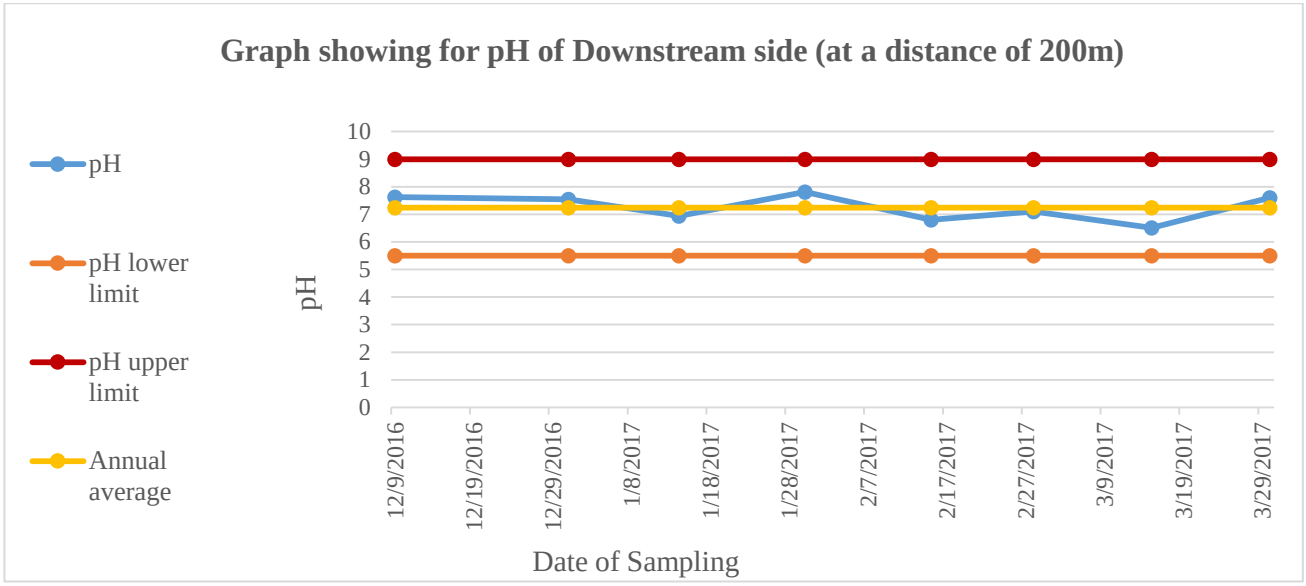
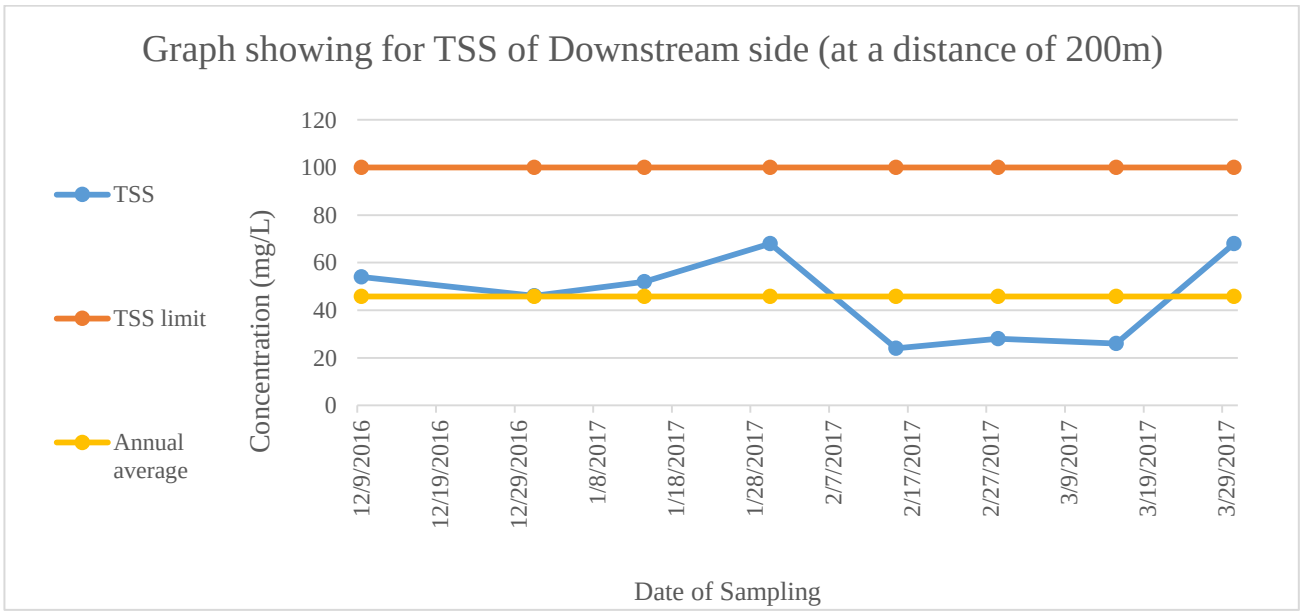

Graph showing for COD of Talcher Colliery Sedimentation tank discharge
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
8/12/2016
8/22/2016
9/1/2016
9/11/2016
9/21/2016
10/1/2016
10/11/2016
10/21/2016
10/31/2016
11/10/2016
11/20/2016
11/30/2016
12/10/2016
12/20/2016
12/30/2016
1/9/2017
1/19/2017
1/29/2017
2/8/2017
2/18/2017
2/28/2017
3/10/2017
3/20/2017
3/30/2017
Date of Sampling

Table: 112
Project: Talcher Colliery U/G
Monitoring Station: Downstream side (at a distance of 200m)

Date of Sampling	pH	Oil & Grease	TSS	COD
09-12-2016	7.62	<4.0	54	16.4
31-12-2016	7.54	<4.0	46	20.8
14-01-2017	6.94	<4.0	52	40
30-01-2017	7.81	<4.0	68	92
15-02-2017	6.8	<4.0	24	16
28-02-2017	7.1	<4.0	28	20
15-03-2017	6.51	<4.0	26	20
30-03-2017	7.6	<4.0	68	56


Graph showing for pH of Downstream side (at a distance of 200m)
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
3/29/2017
Date of Sampling


Graph showing for TSS of Downstream side (at a distance of 200m)
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
3/29/2017
Date of Sampling

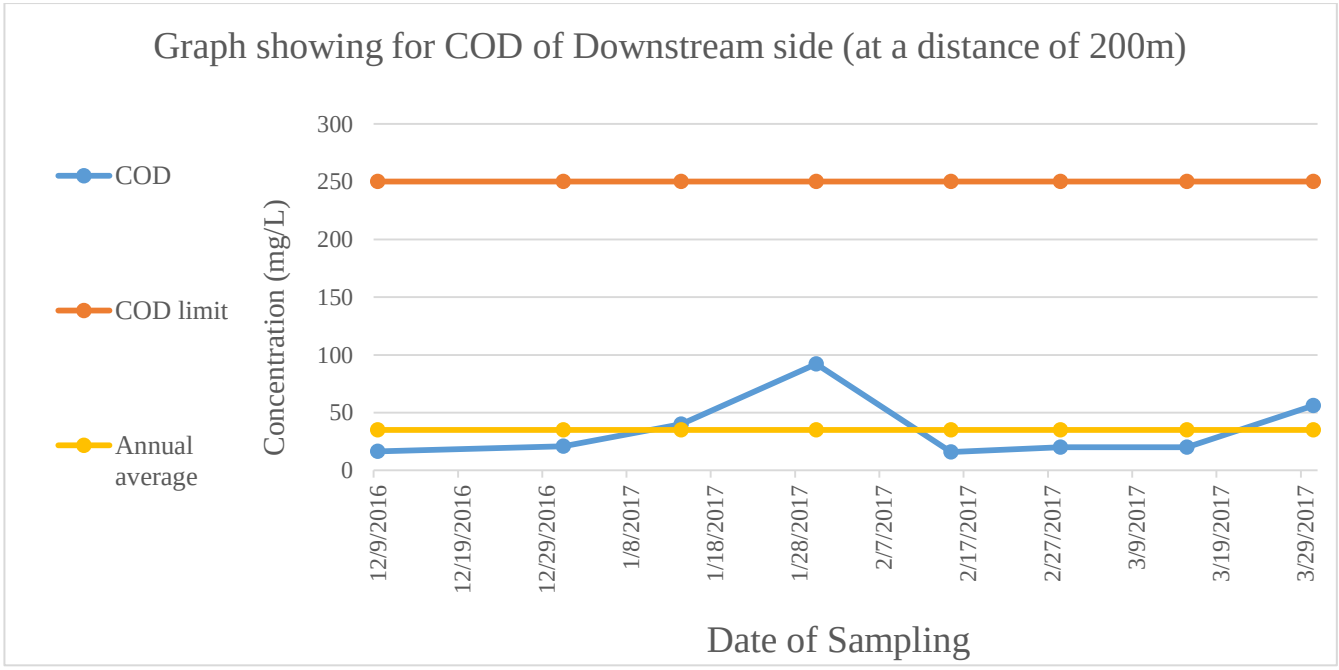
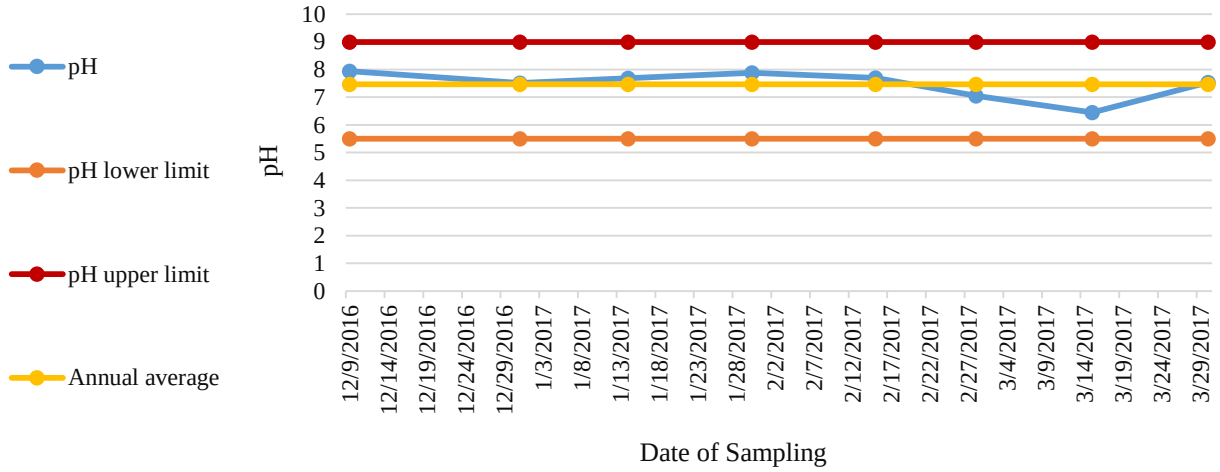

Graph showing for COD of Downstream side (at a distance of 200m)
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
12/9/2016
12/19/2016
12/29/2016
1/8/2017
1/18/2017
1/28/2017
2/7/2017
2/17/2017
2/27/2017
3/9/2017
3/19/2017
3/29/2017
Date of Sampling

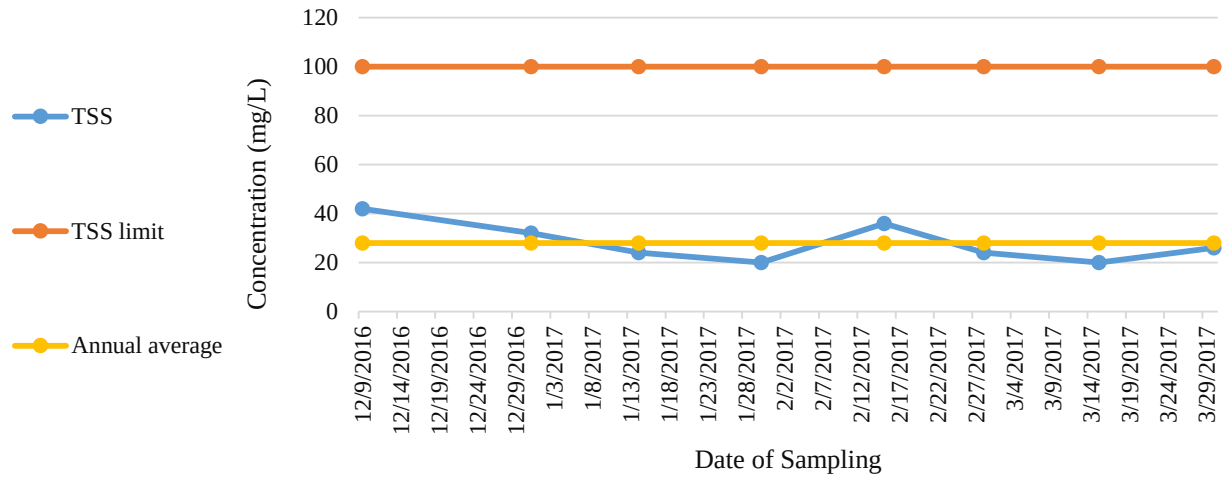
Table:113
Project: Talcher Colliery U/G
Monitoring Station: Upstream side (at a distance of 200m)

Date of Sampling	pH	Oil & Grease	TSS	COD
09-12-2016	7.94	<4.0	42	14.4
31-12-2016	7.51	<4.0	32	12
14-01-2017	7.69	<4.0	24	16
30-01-2017	7.88	<4.0	20	16
15-02-2017	7.7	<4.0	36	24
28-02-2017	7.05	<4.0	24	16
15-03-2017	6.45	<4.0	20	12
30-03-2017	7.54	<4.0	26	20

Graph showing for pH of Upstream side (at a distance of 200m)



Graph showing for TSS of Upstream side (at a distance of 200m)



Graph showing for COD of Upstream side (at a distance of 200m)

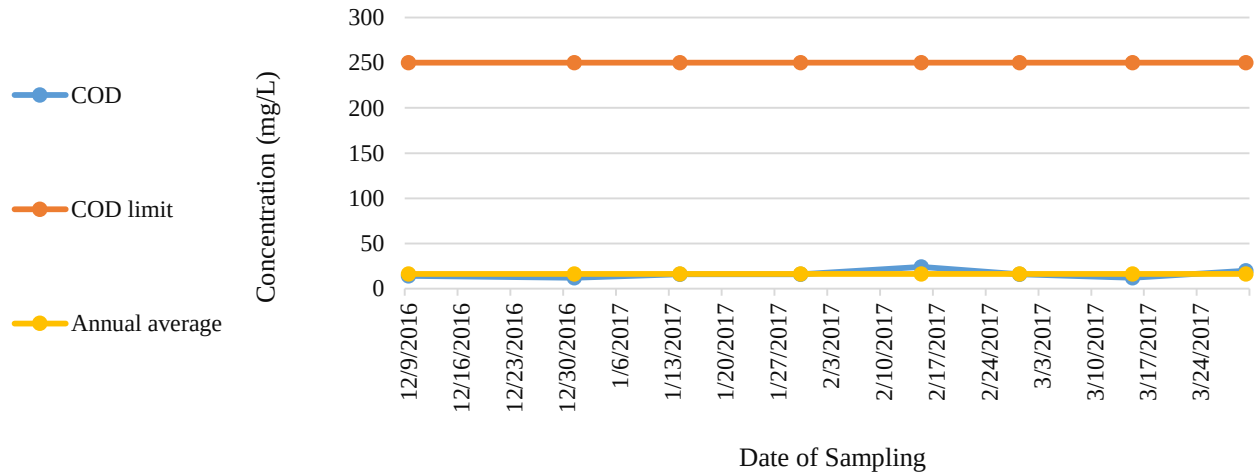
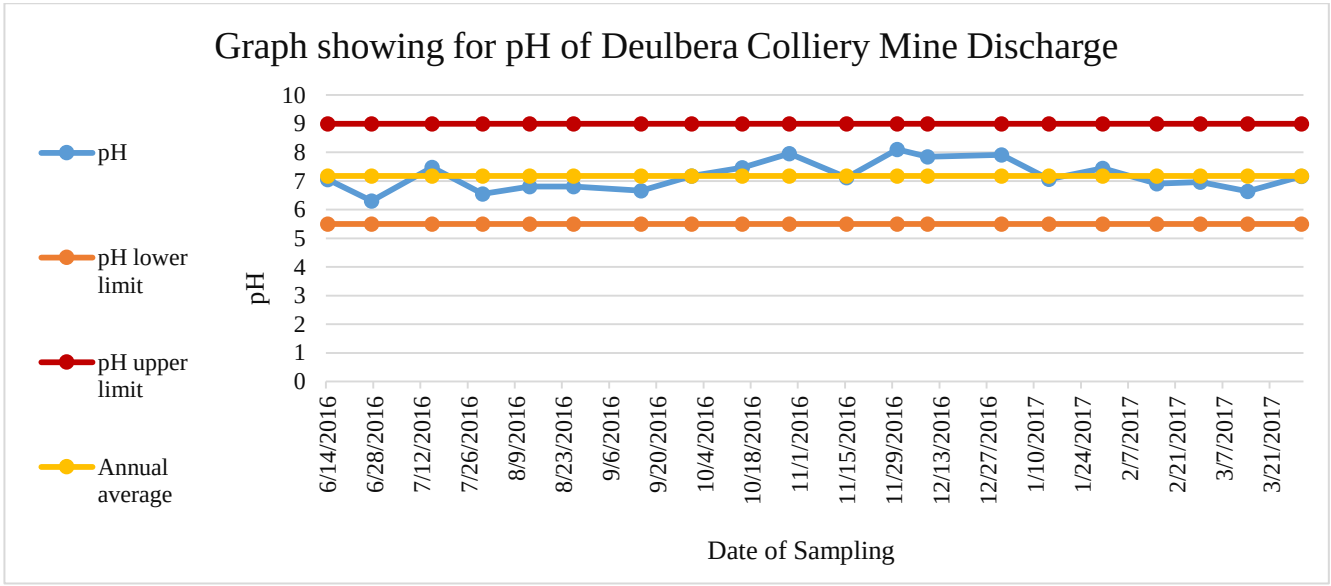
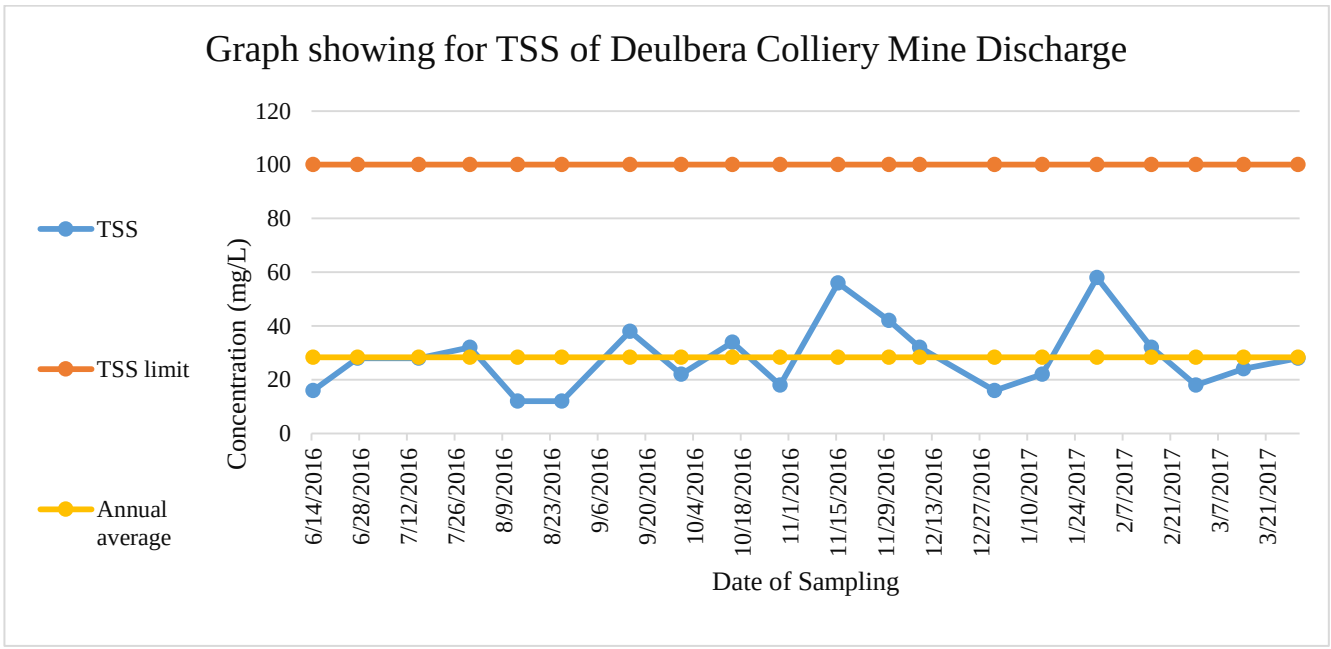


Table:114
Project: Deulbera Colliery U/G
Monitoring Station: Deulbera Colliery Mine Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	7.05	<4.0	16	36
27-06-2016	6.31	<4.0	28	36
15-07-2016	7.48	<4.0	28	40
30-07-2016	6.55	<4.0	32	76
13-08-2016	6.81	<4.0	12	44
26-08-2016	6.81	<4.0	12	16
15-09-2016	6.66	<4.0	38	48
30-09-2016	7.18	<4.0	22	36
15-10-2016	7.47	<4.0	34	48
29-10-2016	7.96	<4.0	18	16
15-11-2016	7.12	<4.0	56	44
30-11-2016	8.1	<4.0	42	28
09-12-2016	7.85	<4.0	32	12
31-12-2016	7.91	<4.0	16	8.8
14-01-2017	7.07	<4.0	22	16
30-01-2017	7.45	<4.0	58	44
15-02-2017	6.91	<4.0	32	16
28-02-2017	6.96	<4.0	18	12
14-03-2017	6.64	<4.0	24	16
30-03-2017	7.17	<4.0	28	20


Graph showing for pH of Deulbera Colliery Mine Discharge
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/14/2016
6/28/2016
7/12/2016
7/26/2016
8/9/2016
8/23/2016
9/6/2016
9/20/2016
10/4/2016
10/18/2016
11/1/2016
11/15/2016
11/29/2016
12/13/2016
12/27/2016
1/10/2017
1/24/2017
2/7/2017
2/21/2017
3/7/2017
3/21/2017
Date of Sampling


Graph showing for TSS of Deulbera Colliery Mine Discharge
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/14/2016
6/28/2016
7/12/2016
7/26/2016
8/9/2016
8/23/2016
9/6/2016
9/20/2016
10/4/2016
10/18/2016
11/1/2016
11/15/2016
11/29/2016
12/13/2016
12/27/2016
1/10/2017
1/24/2017
2/7/2017
2/21/2017
3/7/2017
3/21/2017
Date of Sampling

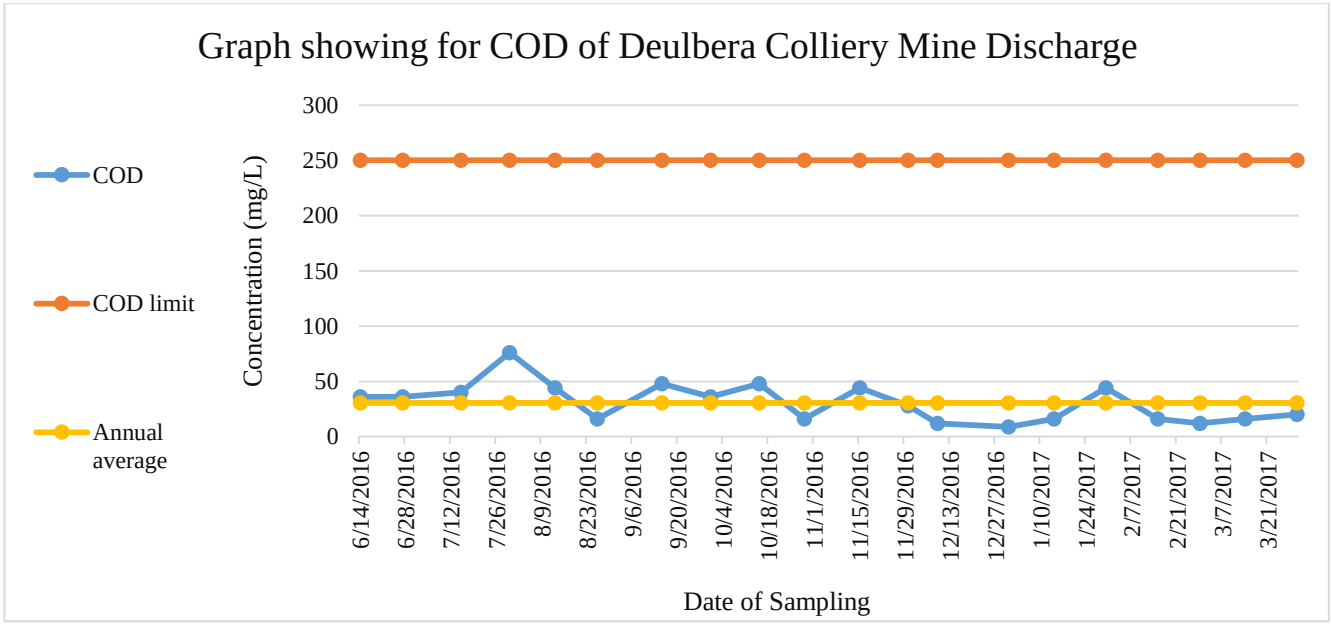
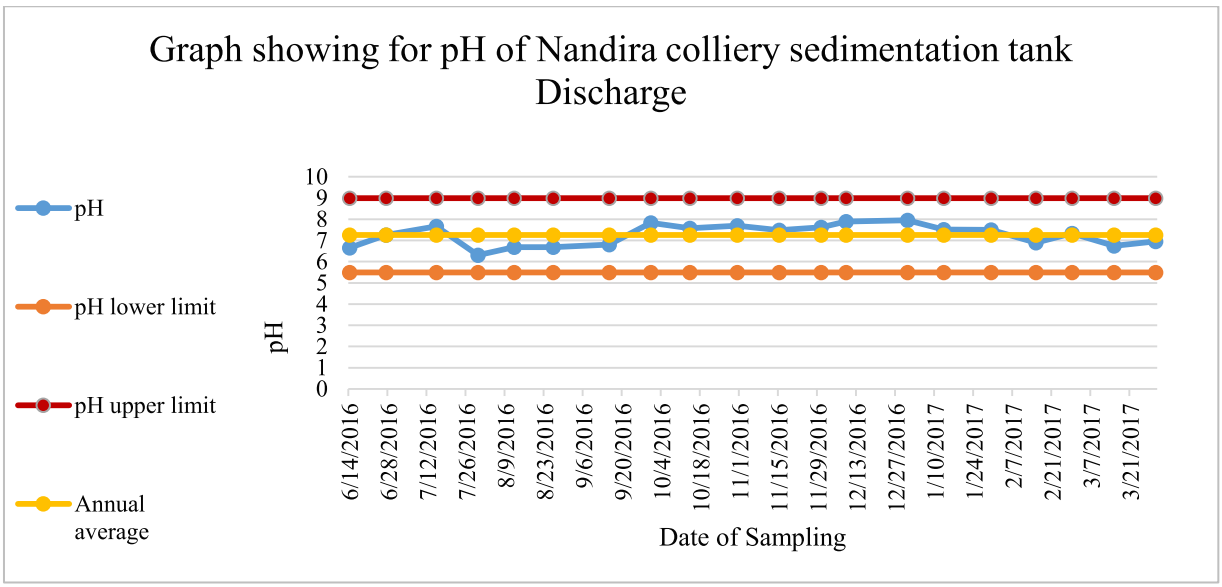
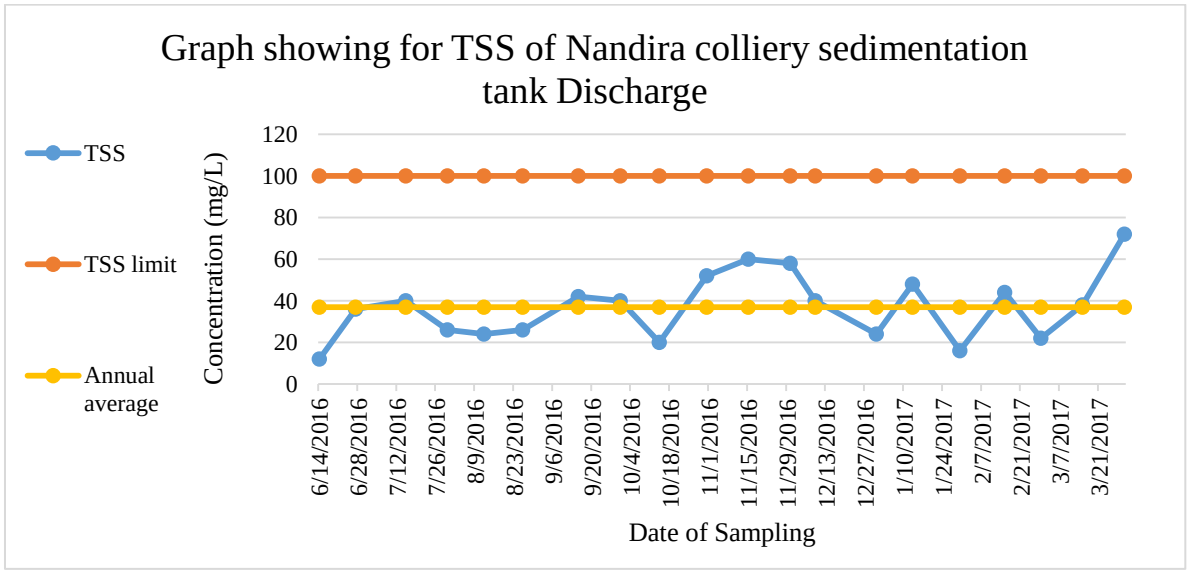

Graph showing for COD of Deulbera Colliery Mine Discharge
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/14/2016
6/28/2016
7/12/2016
7/26/2016
8/9/2016
8/23/2016
9/6/2016
9/20/2016
10/4/2016
10/18/2016
11/1/2016
11/15/2016
11/29/2016
12/13/2016
12/27/2016
1/10/2017
1/24/2017
2/7/2017
2/21/2017
3/7/2017
3/21/2017
Date of Sampling

Table:115
Project: Nandira colliery U/G
Monitoring Station: Nandira colliery sedimentation tank Discharge

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	6.65	<4.0	12	48
27-06-2016	7.26	<4.0	36	44
15-07-2016	7.66	<4.0	40	48
30-07-2016	6.31	<4.0	26	52
30-11-2016	7.62	<4.0	58	44
31-12-2016	7.95	<4.0	24	11.6
30-01-2017	7.5	<4.0	16	12
12-08-2016	6.69	<4.0	24	56
26-08-2016	6.69	<4.0	26	36
15-09-2016	6.8	<4.0	42	20
30-09-2016	7.83	<4.0	40	28
14-10-2016	7.58	<4.0	20	36
31-10-2016	7.7	<4.0	52	48
15-11-2016	7.48	<4.0	60	48
09-12-2016	7.89	<4.0	40	15.2
13-01-2017	7.51	<4.0	48	36
15-02-2017	6.89	<4.0	44	36
28-02-2017	7.34	<4.0	22	8
15-03-2017	6.75	<4.0	38	32
30-03-2017	6.95	<4.0	72	64


Graph showing for pH of Nandira colliery sedimentation tank Discharge
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/14/2016
6/28/2016
7/12/2016
7/26/2016
8/9/2016
8/23/2016
9/6/2016
9/20/2016
10/4/2016
10/18/2016
11/1/2016
11/15/2016
11/29/2016
12/13/2016
12/27/2016
1/10/2017
1/24/2017
2/7/2017
2/21/2017
3/7/2017
3/21/2017
Date of Sampling


Graph showing for TSS of Nandira colliery sedimentation tank Discharge
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/14/2016
6/28/2016
7/12/2016
7/26/2016
8/9/2016
8/23/2016
9/6/2016
9/20/2016
10/4/2016
10/18/2016
11/1/2016
11/15/2016
11/29/2016
12/13/2016
12/27/2016
1/10/2017
1/24/2017
2/7/2017
2/21/2017
3/7/2017
3/21/2017
Date of Sampling

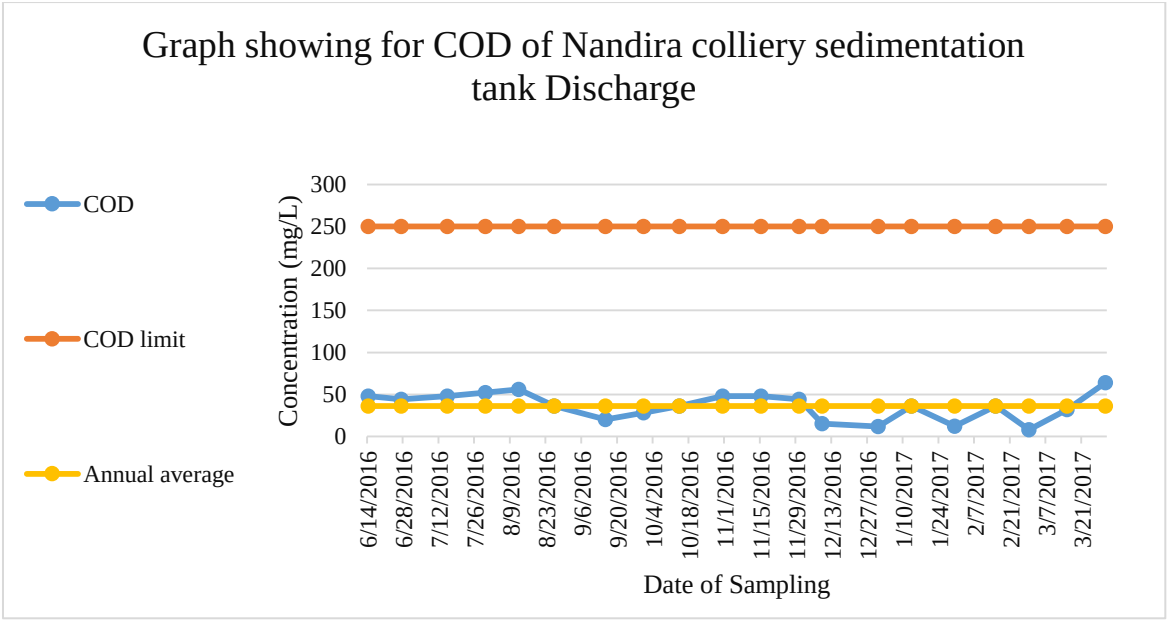
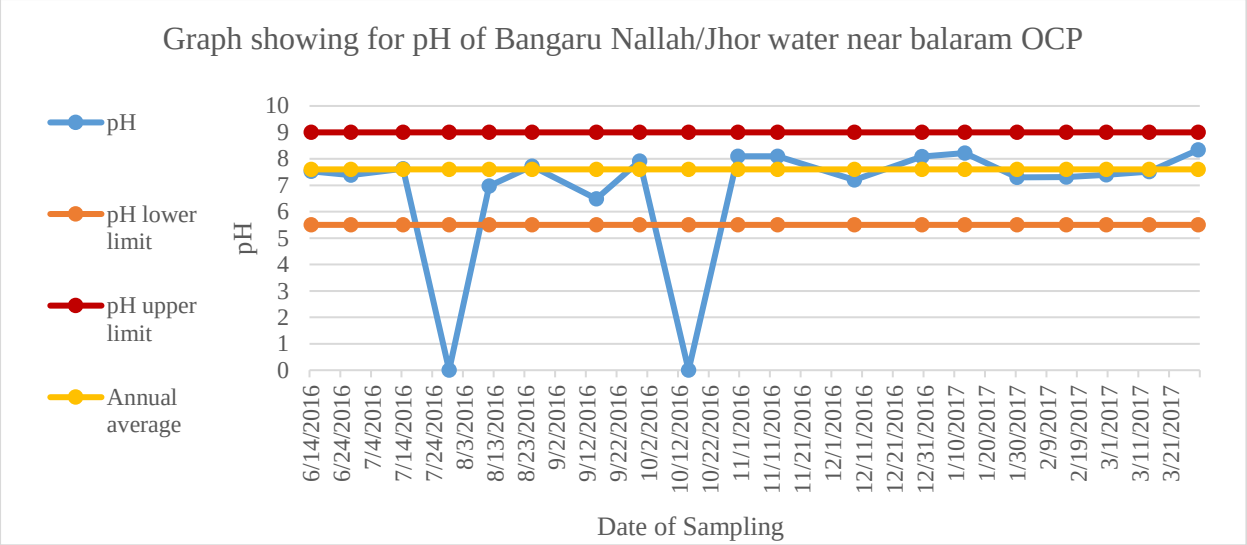
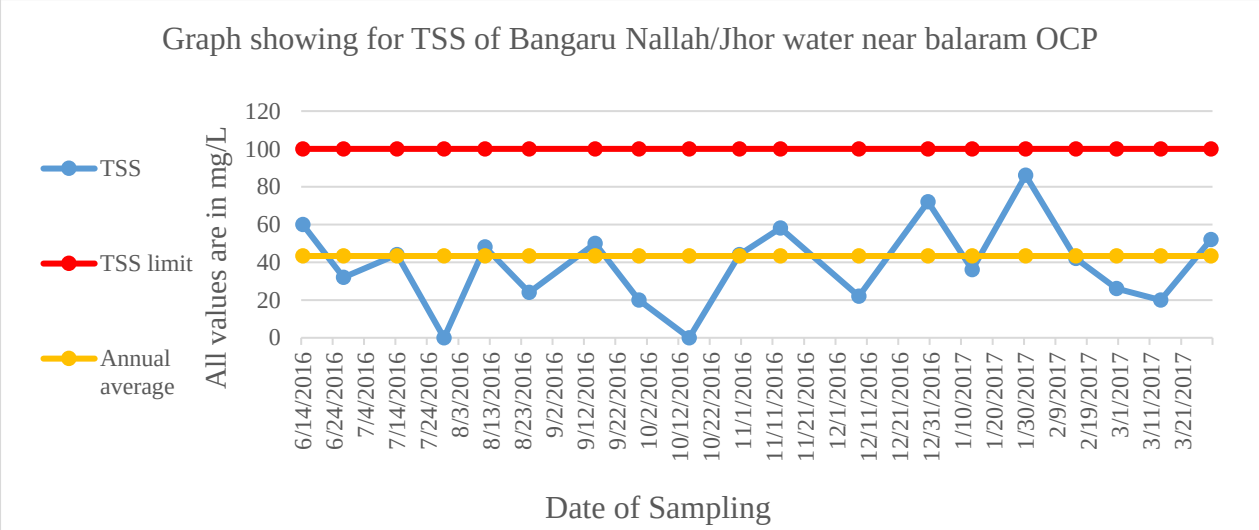

Graph showing for COD of Nandira colliery sedimentation tank Discharge
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/14/2016
6/28/2016
7/12/2016
7/26/2016
8/9/2016
8/23/2016
9/6/2016
9/20/2016
10/4/2016
10/18/2016
11/1/2016
11/15/2016
11/29/2016
12/13/2016
12/27/2016
1/10/2017
1/24/2017
2/7/2017
2/21/2017
3/7/2017
3/21/2017
Date of Sampling

Table:116
Project: Balaram OCP
Monitoring Station: Bangaru Nallah/Jhor water near balaram OCP

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	7.53	<4.0	60	76
27-06-2016	7.38	<4.0	32	96
14-07-2016	7.62	<4.0	44	44
29-07-2016	No discharge			
11-08-2016	6.97	<4.0	48	72
25-08-2016	7.72	<4.0	24	32
15-09-2016	6.48	<4.0	50	76
29-09-2016	7.92	<4.0	20	52
15-10-2016	No discharge			
31-10-2016	8.1	<4.0	44	52
13-11-2016	8.1	<4.0	58	48
08-12-2016	7.2	<4.0	22	8
30-12-2016	8.09	<4.0	72	52
13-01-2017	8.22	<4.0	36	28
30-01-2017	7.3	<4.0	86	148
15-02-2017	7.31	<4.0	42	24
28-02-2017	7.4	<4.0	26	16
14-03-2017	7.52	<4.0	20	8
30-03-2017	8.34	<4.0	52	48

Table:


Graph showing for pH of Bangaru Nallah/Jhor water near balaram OCP
pH
pH lower limit
pH upper limit
Annual average
pH
Date of Sampling


Graph showing for TSS of Bangaru Nallah/Jhor water near balaram OCP
TSS
TSS limit
Annual average
All values are in mg/L
Date of Sampling

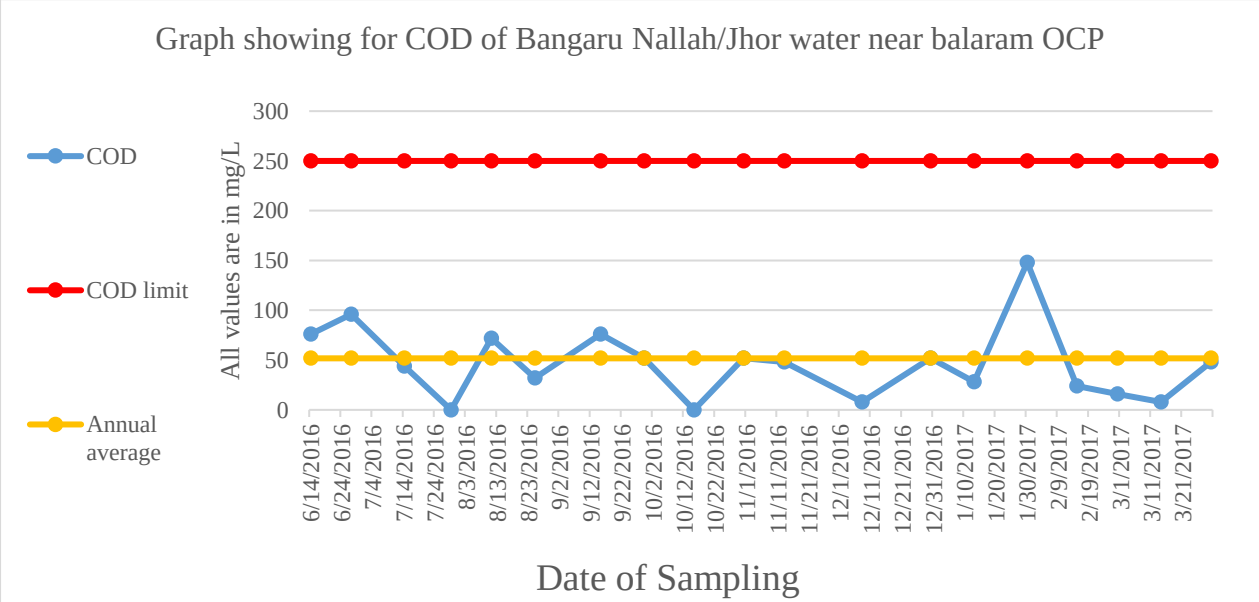
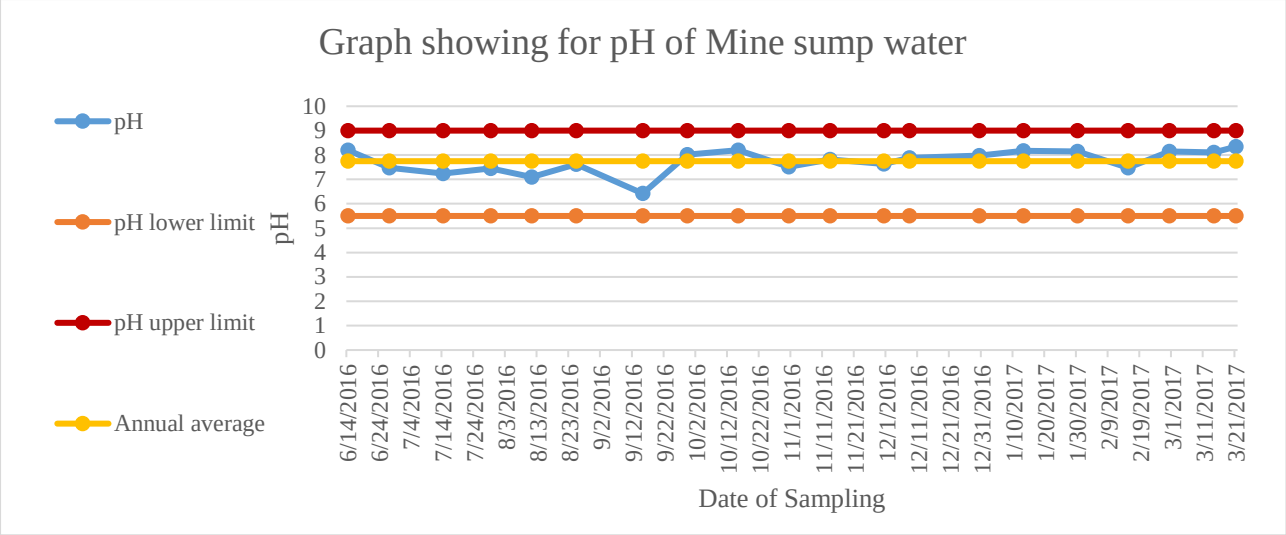
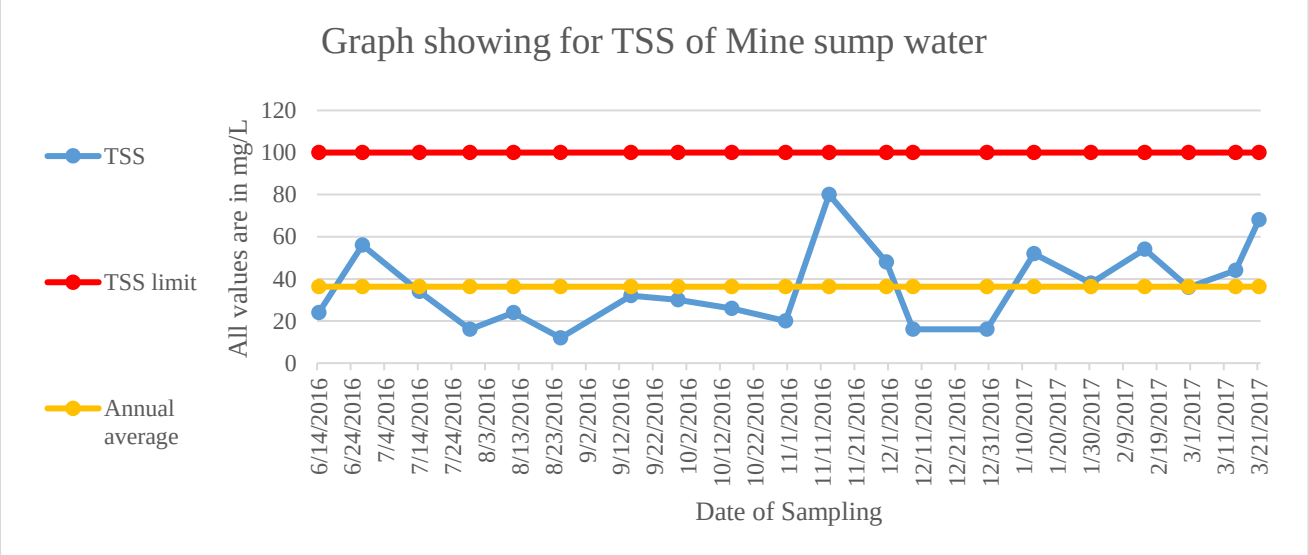

Graph showing for COD of Bangaru Nallah/Jhor water near balaram OCP
COD
COD limit
Annual average
All values are in mg/L
Date of Sampling

TABLE: 117

Project: Balaram OCP
Monitoring Station: Mine sump water

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	8.2	<4.0	24	36
27-06-2016	7.48	<4.0	56	44
14-07-2016	7.24	<4.0	34	40
29-07-2016	7.45	<4.0	16	40
11-08-2016	7.1	<4.0	24	36
25-08-2016	7.62	<4.0	12	20
15-09-2016	6.42	<4.0	32	44
29-09-2016	8.01	<4.0	30	28
15-10-2016	8.2	<4.0	26	16
31-10-2016	7.51	<4.0	20	28
13-11-2016	7.82	<4.0	80	68
30-11-2016	7.64	<4.0	48	32
08-12-2016	7.88	<4.0	16	7.2
30-12-2016	7.98	<4.0	16	8.4
13-01-2017	8.17	<4.0	52	40
30-01-2017	8.14	<4.0	38	24
15-02-2017	7.48	<4.0	54	36
28-02-2017	8.15	<4.0	36	28
14-03-2017	8.1	<4.0	44	32
21-03-2017	8.34	<4.0	68	60


Graph showing for pH of Mine sump water
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling


Graph showing for TSS of Mine sump water
TSS
TSS limit
Annual average
All values are in mg/L
120
100
80
60
40
20
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

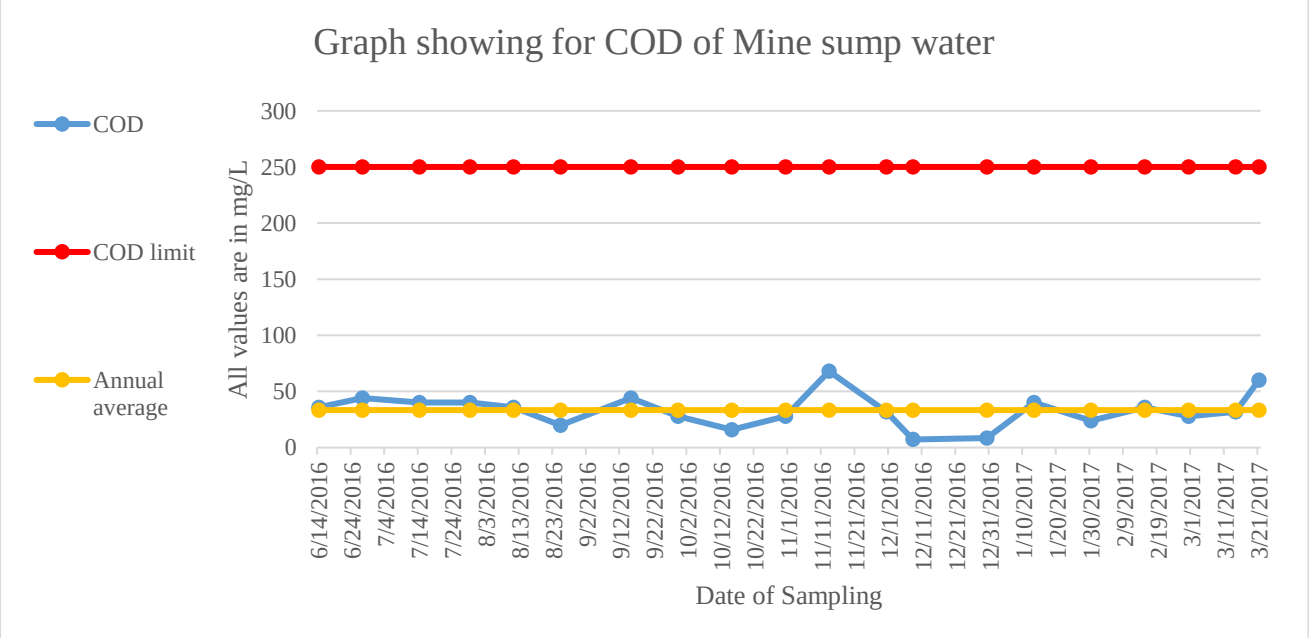

Graph showing for COD of Mine sump water
COD
COD limit
Annual average
All values are in mg/L
300
250
200
150
100
50
0
6/14/2016
6/24/2016
7/4/2016
7/14/2016
7/24/2016
8/3/2016
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

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

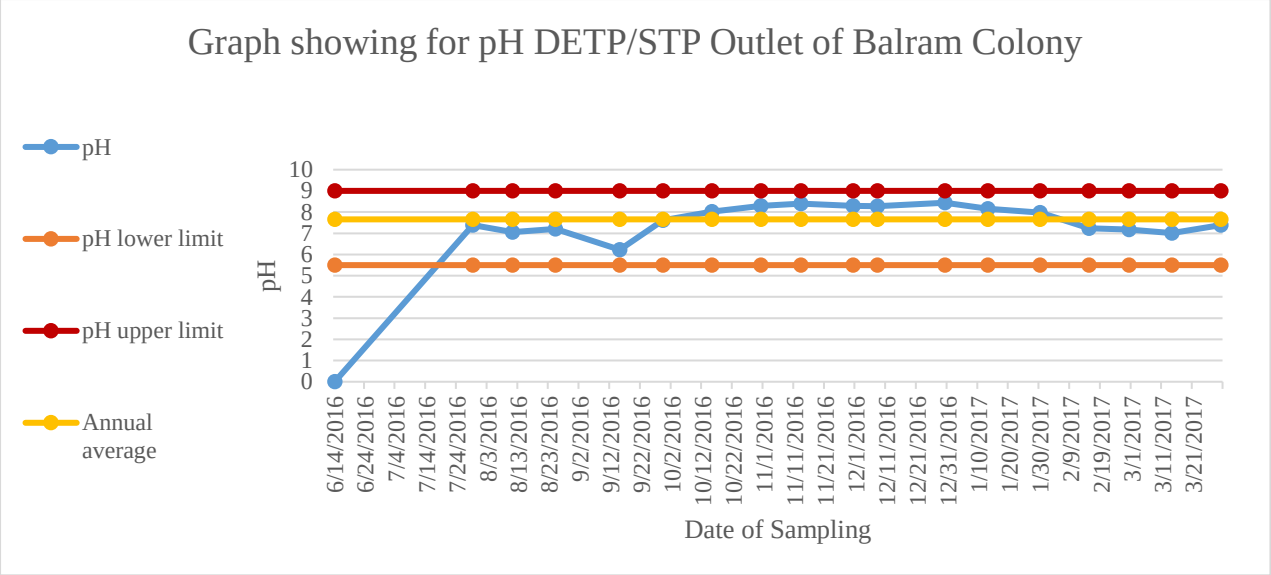
Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	7.83	<4.0	16	104
29-09-2016	7.34	<4.0	28	96
08-12-2016	7.4	<4.0	112	240
14-03-2017	7.22	<4.0	48	36

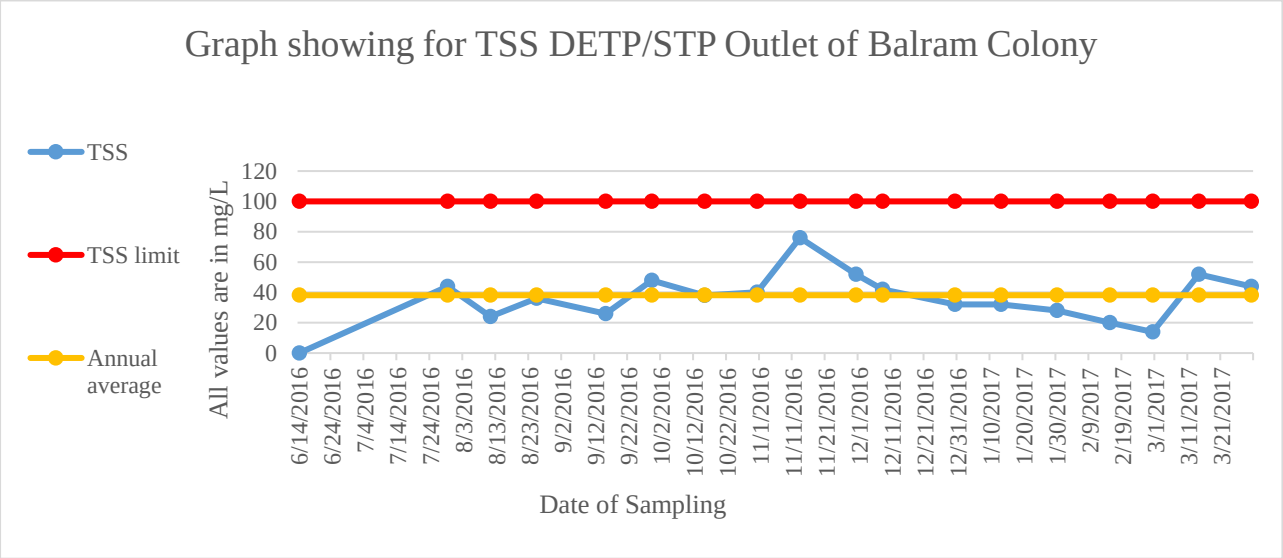
Table: 119
Project: Balaram OCP
Monitoring Station: O&G trap outlet

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	7.45	<4.0	22	84
14-03-2017	7.4	<4.0	18	12
15-09-2016	5.72	<4.0	34	32
29-09-2016	7.7	<4.0	14	40
08-12-2016	7.65	<4.0	30	12

Table: 120
Project: Balaram OCP
Monitoring Station: DETP / STP outlet of Balram Colony

Date of Sampling	pH	TSS	BOD
14-06-2016	DRY		
29-07-2016	7.39	44	5.8
11-08-2016	7.05	24	5.7
25-08-2016	7.2	36	4.9
15-09-2016	6.22	26	6.7
29-09-2016	7.62	48	6.2
15-10-2016	8.02	38	3.9
31-10-2016	8.29	40	6.1
13-11-2016	8.4	76	6.3
30-11-2016	8.3	52	6.5
08-12-2016	8.28	42	7.6
30-12-2016	8.44	32	6.8
13-01-2017	8.16	32	3.2
30-01-2017	7.98	28	3.9
15-02-2017	7.24	20	3.2
28-02-2017	7.18	14	2.4
14-03-2017	7.01	52	2.8
30-03-2017	7.38	44	2.8


Graph showing for pH DETP/STP Outlet of Balram Colony
pH
pH lower limit
pH upper limit
Annual average
pH
Date of Sampling


Graph showing for TSS DETP/STP Outlet of Balram Colony
TSS
TSS limit
Annual average
All values are in mg/L
Date of Sampling

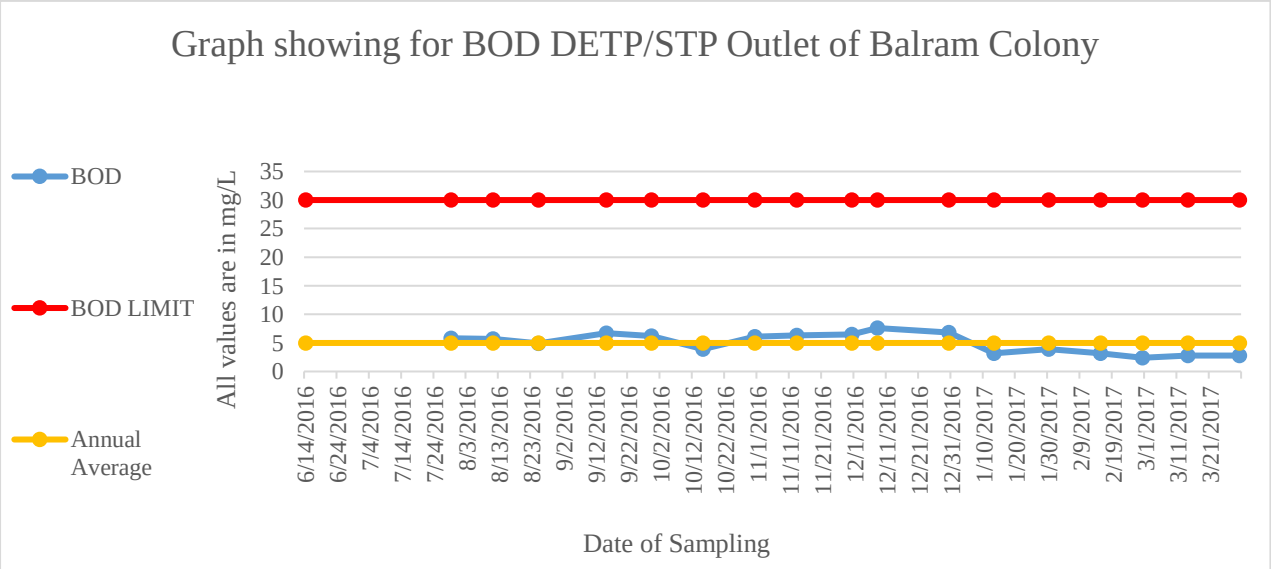
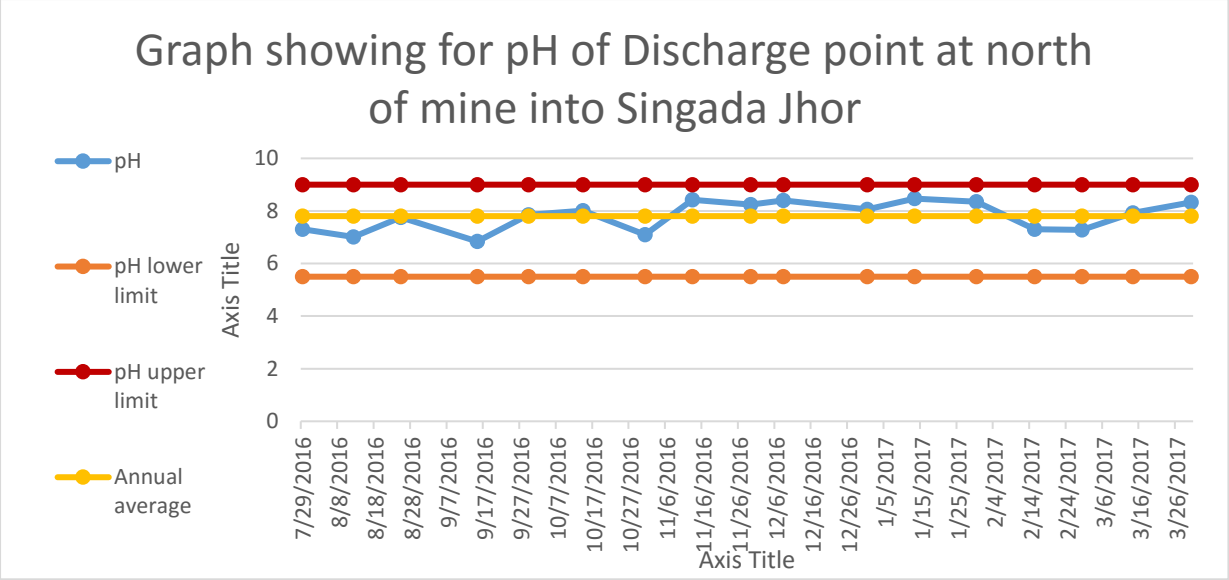
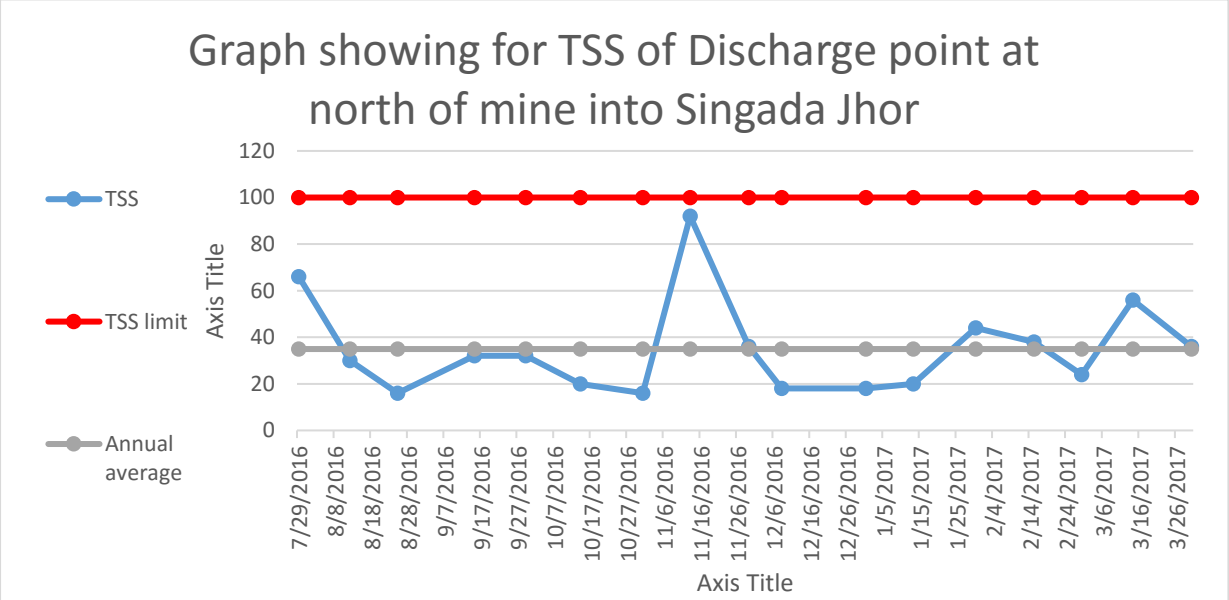

Graph showing for BOD DETP/STP Outlet of Balram Colony
BOD
BOD LIMIT
Annual Average
All values are in mg/L
Date of Sampling

Table:121
Project: Hingula OCP
Monitoring Station: Discharge point at north of mine into Singada Jhor

Date of Sampling	pH	Oil & Grease	TSS	COD
14-06-2016	No discharge			
27-06-2016	No discharge			
14-07-2016	No discharge			
29-07-2016	7.31	<4.0	66	80
12-08-2016	7.01	<4.0	30	132
25-08-2016	7.75	<4.0	16	28
15-09-2016	6.84	<4.0	32	28
29-09-2016	7.85	<4.0	32	24
14-10-2016	8.01	<4.0	20	36
31-10-2016	7.1	<4.0	16	36
13-11-2016	8.43	<4.0	92	88
29-11-2016	8.24	<4.0	36	24
08-12-2016	8.4	<4.0	18	9.2
31-12-2016	8.06	<4.0	18	11.2
13-01-2017	8.47	<4.0	20	12
30-01-2017	8.35	<4.0	44	36
15-02-2017	7.3	<4.0	38	20
28-02-2017	7.28	<4.0	24	16
14-03-2017	7.93	<4.0	56	44
30-03-2017	8.33	<4.0	36	24


Graph showing for pH of Discharge point at north of mine into Singada Jhor
pH
pH lower limit
pH upper limit
Annual average
Axis Title
10
8
6
4
2
0
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Axis Title


Graph showing for TSS of Discharge point at north of mine into Singada Jhor
TSS
TSS limit
Annual average
Axis Title
120
100
80
60
40
20
0
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Axis Title

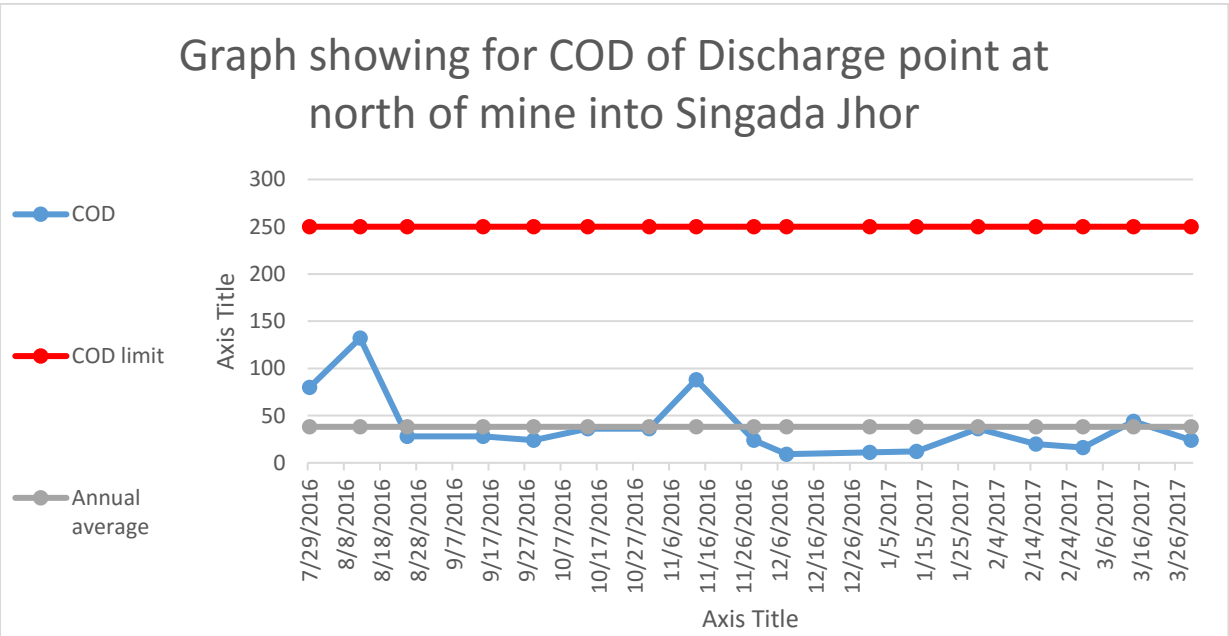

Graph showing for COD of Discharge point at north of mine into Singada Jhor
COD
COD limit
Annual average
Axis Title
300
250
200
150
100
50
0
7/29/2016
8/8/2016
8/18/2016
8/28/2016
9/7/2016
9/17/2016
9/27/2016
10/7/2016
10/17/2016
10/27/2016
11/6/2016
11/16/2016
11/26/2016
12/6/2016
12/16/2016
12/26/2016
1/5/2017
1/15/2017
1/25/2017
2/4/2017
2/14/2017
2/24/2017
3/6/2017
3/16/2017
3/26/2017
Axis Title

Table:122
Project: Lingaraj OCP
Monitoring Station: Mine sump water

Date of Sampling	pH
13-08-2016	6.99
25-08-2016	7.05
15-09-2016	6.68
15-10-2016	7.58
15-11-2016	7.99
08-12-2016	7.26
13-01-2017	7.85
15-02-2017	7.2
15-03-2017	8.08

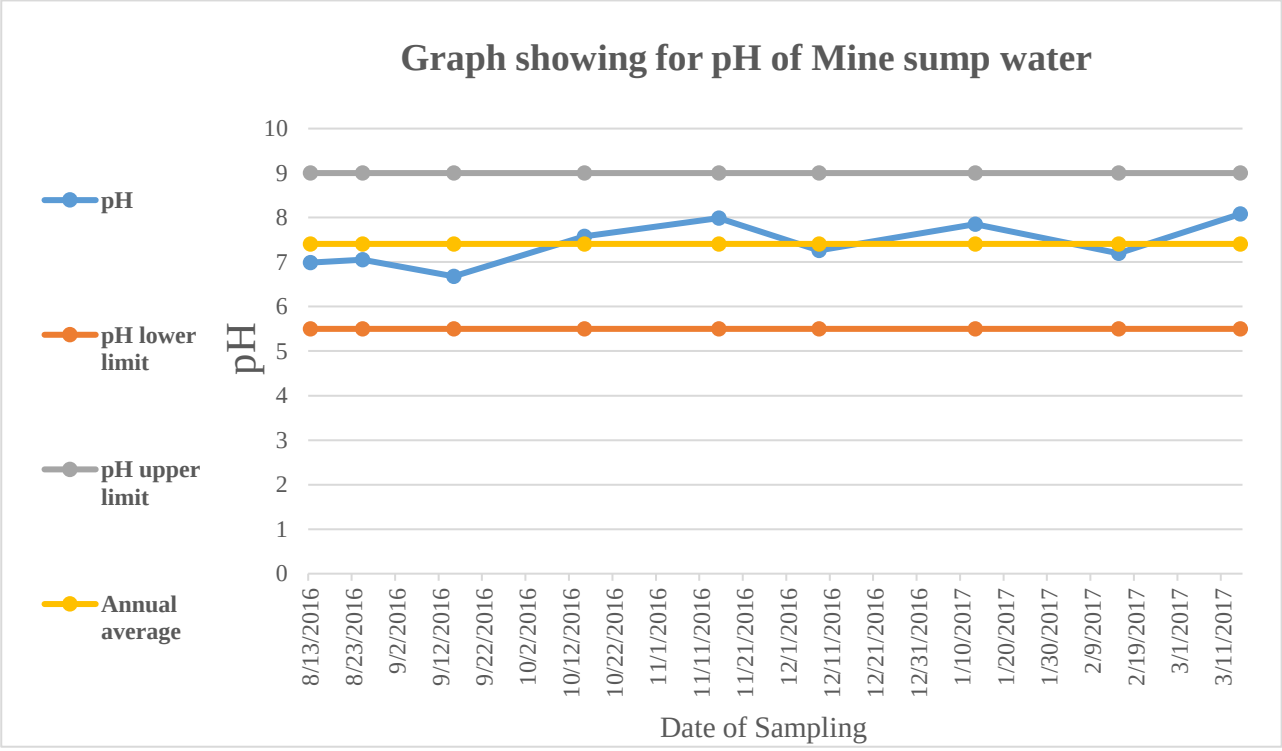
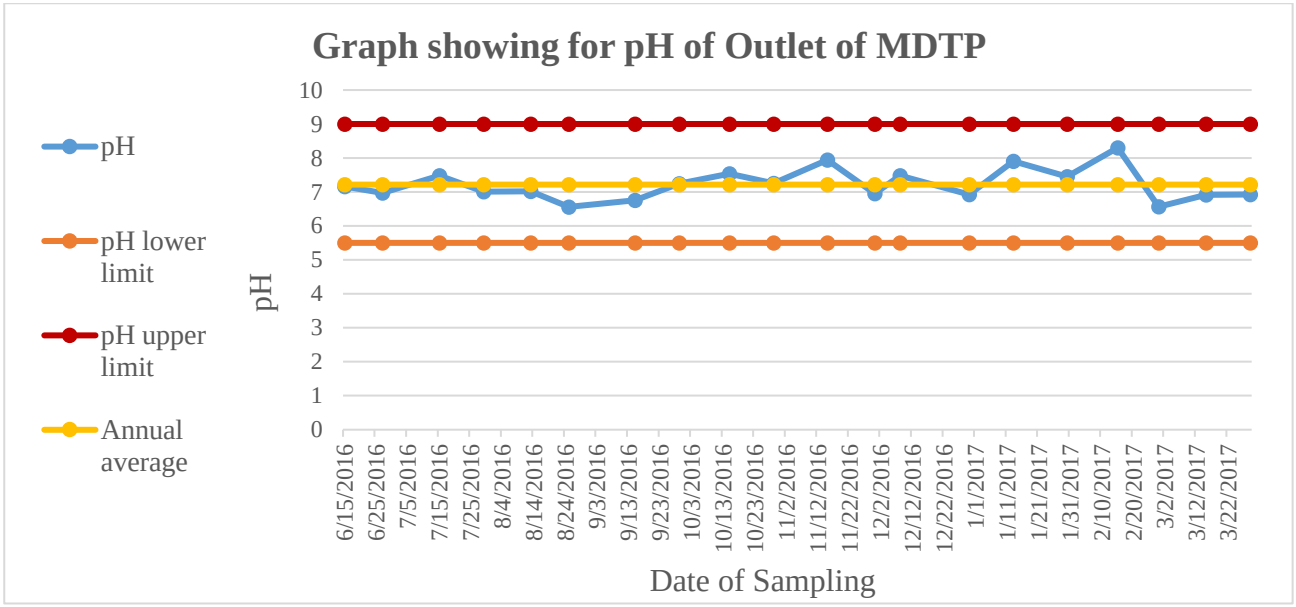
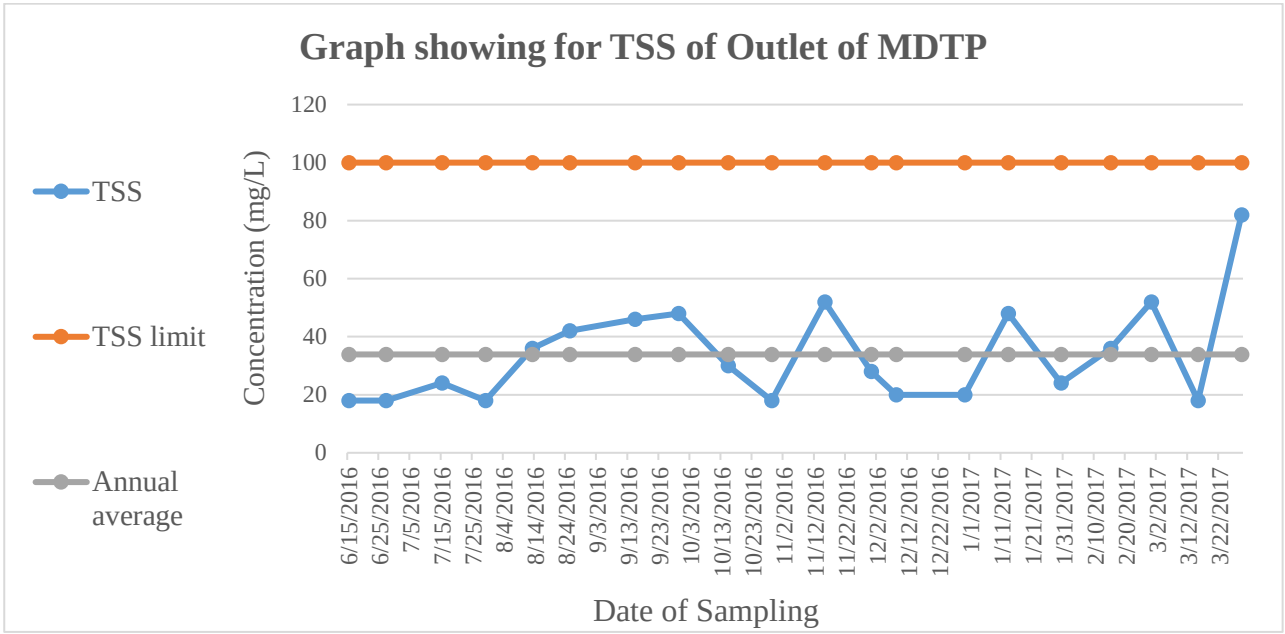


Table:123
Project: Lingaraj OCP
Monitoring Station: Outlet of MDTP

Date of Sampling	pH	Oil & Grease	TSS	COD
15-06-2016	7.16	<4.0	18	56
27-06-2016	6.97	<4.0	18	84
15-07-2016	7.48	<4.0	24	24
29-07-2016	7.01	<4.0	18	54
13-08-2016	7.02	<4.0	36	56
25-08-2016	6.56	<4.0	42	72
15-09-2016	6.75	<4.0	46	42
29-09-2016	7.24	<4.0	48	122
15-10-2016	7.54	<4.0	30	52
29-10-2016	7.25	<4.0	18	28
15-11-2016	7.94	<4.0	52	44
30-11-2016	6.95	<4.0	28	16
08-12-2016	7.48	<4.0	20	8.4
30-12-2016	6.92	<4.0	20	8.4
13-01-2017	7.9	<4.0	48	40
30-01-2017	7.45	<4.0	24	12
15-02-2017	8.3	<4.0	36	24
28-02-2017	6.57	<4.0	52	40
15-03-2017	6.91	<4.0	18	12
29-03-2017	6.92	<4.0	82	96


Graph showing for pH of Outlet of MDTP
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
3/22/2017
Date of Sampling


Graph showing for TSS of Outlet of MDTP
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
3/22/2017
Date of Sampling

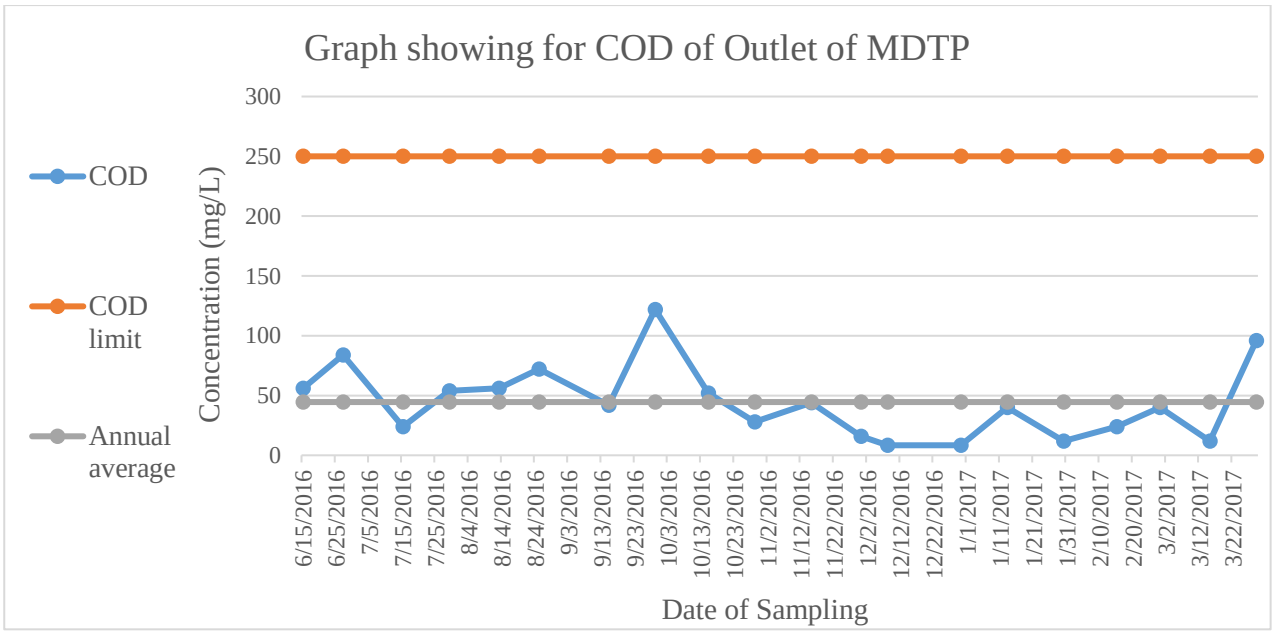
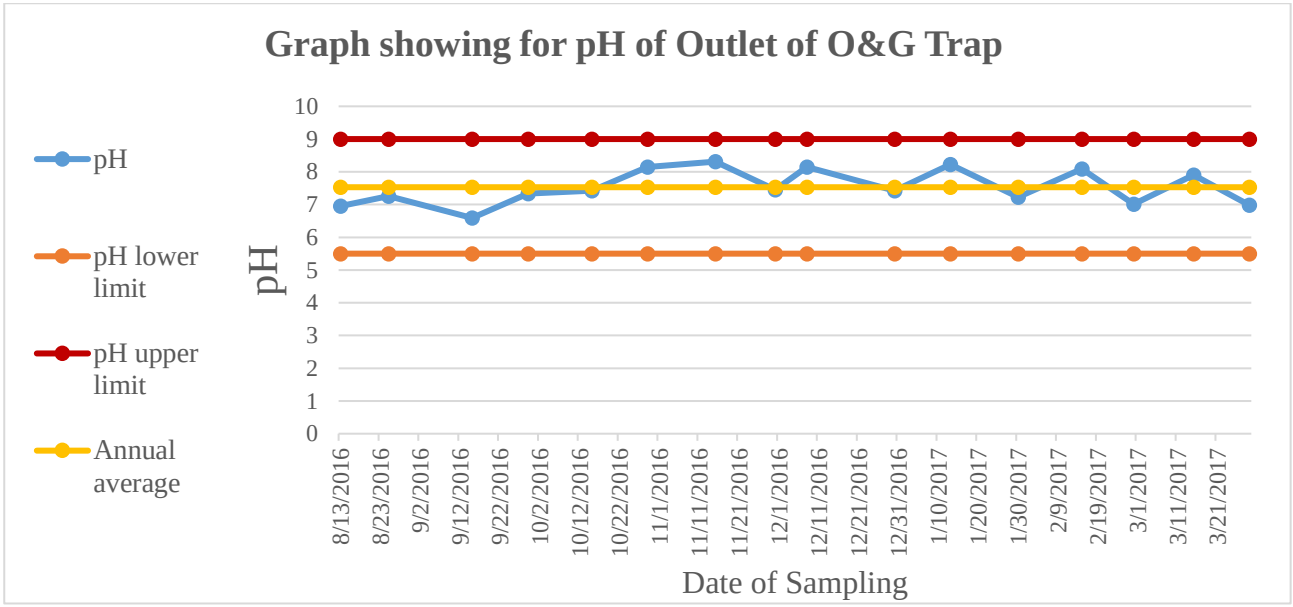
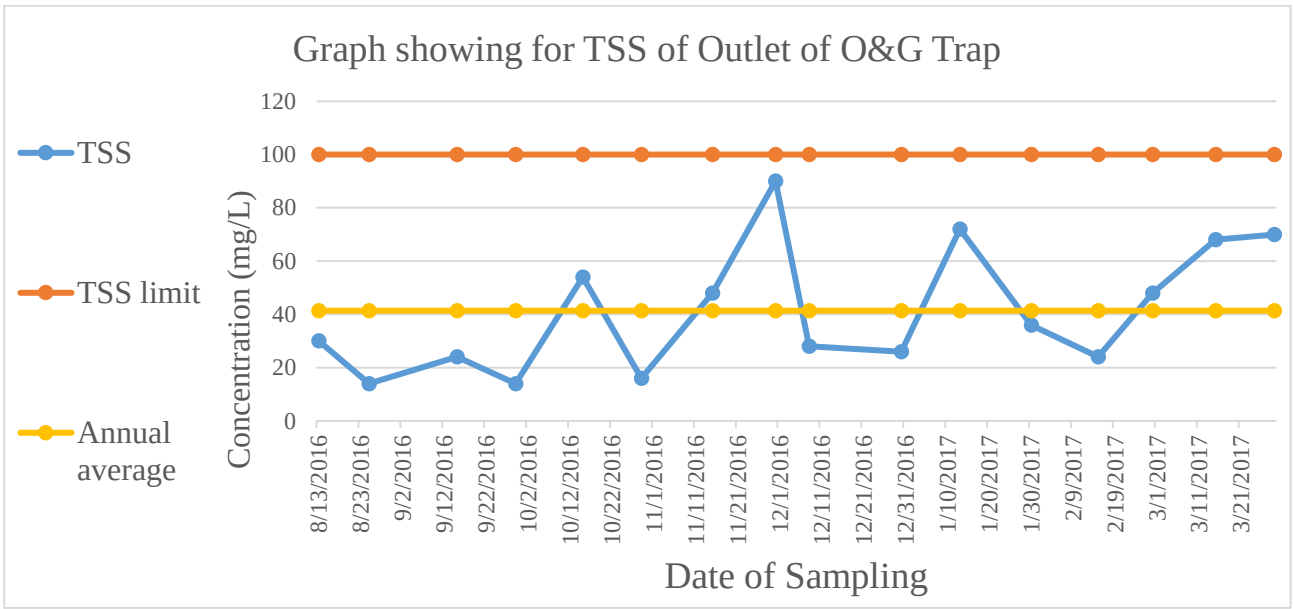

Graph showing for COD of Outlet of MDTP
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
6/15/2016
6/25/2016
7/5/2016
7/15/2016
7/25/2016
8/4/2016
8/14/2016
8/24/2016
9/3/2016
9/13/2016
9/23/2016
10/3/2016
10/13/2016
10/23/2016
11/2/2016
11/12/2016
11/22/2016
12/2/2016
12/12/2016
12/22/2016
1/1/2017
1/11/2017
1/21/2017
1/31/2017
2/10/2017
2/20/2017
3/2/2017
3/12/2017
3/22/2017
Date of Sampling

Table:124
Project: Lingaraj OCP
Monitoring Station: Outlet of O & G Trap

Date of Sampling	pH	Oil & Grease	TSS	COD
30-11-2016	7.45	<4.0	90	72
30-12-2016	7.42	<4.0	26	8
30-01-2017	7.23	<4.0	36	16
13-08-2016	6.95	<4.0	30	32
25-08-2016	7.26	<4.0	14	24
15-09-2016	6.59	<4.0	24	22
29-09-2016	7.33	<4.0	14	32
15-10-2016	7.42	<4.0	54	64
29-10-2016	8.15	<4.0	16	20
15-11-2016	8.31	<4.0	48	36
08-12-2016	8.15	<4.0	28	7.2
13-01-2017	8.22	<4.0	72	60
15-02-2017	8.09	<4.0	24	16
28-02-2017	7.01	<4.0	48	36
15-03-2017	7.9	<4.0	68	56
29-03-2017	6.98	<4.0	70	60


Graph showing for pH of Outlet of O&G Trap
pH
pH lower limit
pH upper limit
Annual average
pH
10
9
8
7
6
5
4
3
2
1
0
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling


Graph showing for TSS of Outlet of O&G Trap
TSS
TSS limit
Annual average
Concentration (mg/L)
120
100
80
60
40
20
0
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

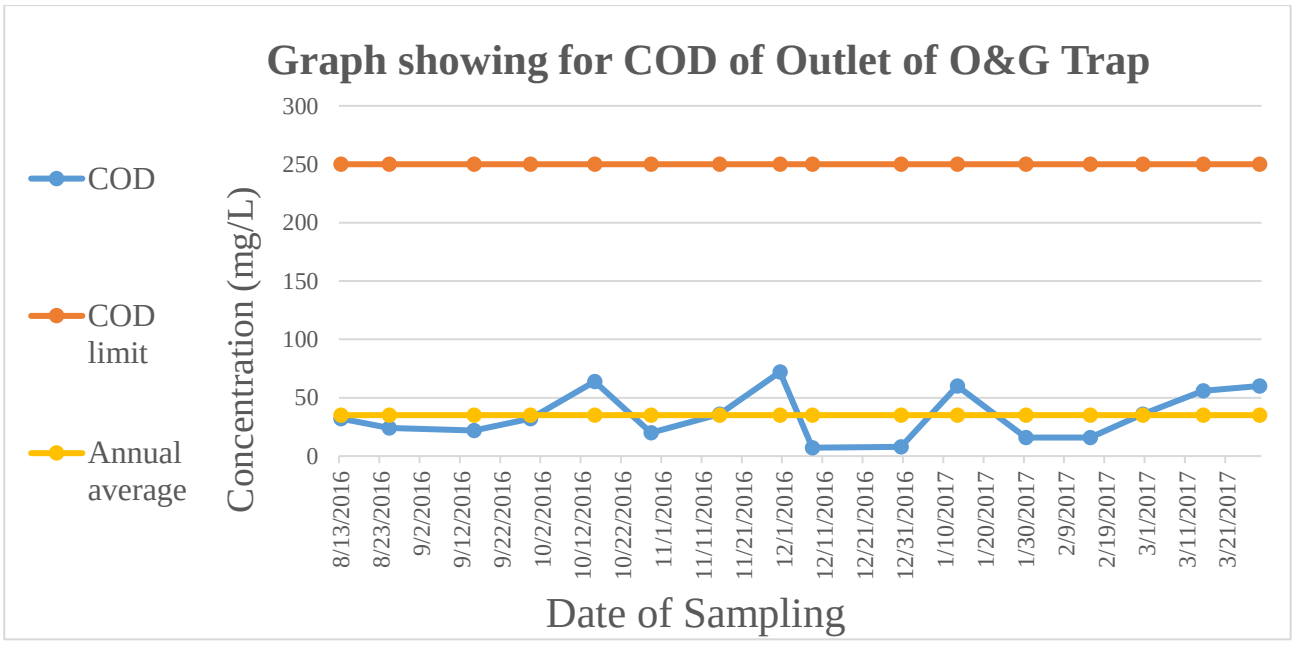

Graph showing for COD of Outlet of O&G Trap
COD
COD limit
Annual average
Concentration (mg/L)
300
250
200
150
100
50
0
8/13/2016
8/23/2016
9/2/2016
9/12/2016
9/22/2016
10/2/2016
10/12/2016
10/22/2016
11/1/2016
11/11/2016
11/21/2016
12/1/2016
12/11/2016
12/21/2016
12/31/2016
1/10/2017
1/20/2017
1/30/2017
2/9/2017
2/19/2017
3/1/2017
3/11/2017
3/21/2017
Date of Sampling

TABLE: 125

22 Parameter Effluent Quality Data Yearly: Jagannath Area

Project (OCP / UG)	Jagannath OCP	Bhubaneswari OCP	
NAME OF THE STATION	Mine disch. Water	Mine disch. in Bangaru jhor	MoEF-Sch-VI Standards
Date	27.11.16	27.11.16	
Colour(Hazen)	Acceptable	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.4	23.5	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	1.8	2	10.0
Ammonical Nitrogen (as N)(mg/L)	0.32	0.22	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	2.66	2.11	100.0
BOD [3 days at 27oC] (mg/L)	10	12	30.0
Arsenic(mg/L)	<0.01	<0.01	0.2
Lead(mg/L)	<0.05	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.1	<0.1	2.0
Copper(mg/L)	<0.02	<0.02	3.0
Zinc(mg/L)	<0.02	<0.02	5.0
Selenium(mg/L)	<0.01	<0.01	0.05
Cadmium(mg/L)	<0.0005	<0.0005	2.0
Nickel(mg/L)	<0.1	<0.1	3.0
Fluoride(mg/L)	1.44	1.04	2.0
Sulphide(mg/L)	0.005	0.003	2.0
Phenolic Compound(mg/L)	<0.001	<0.001	1.0
Manganese(mg/L)	0.37	0.15	2.0
Iron(mg/L)	<0.05	<0.05	3.0
Disolved Phosphate(mg/L)	<0.01	<0.01	5.0

TABLE:126

22 Parameter Effluent Quality Data Yearly: Bharatpur Area

Project (OCP / UG)	Bharatpur OCP	Ananta OCP	
NAME OF THE STATION	Mine disch.before pt.of confl.with Bangaru nulla	Mine disch. Water	MoEF-Sch-VI Standards
Date	27.11.16	27.11.16	
Colour(Hazen)	Acceptable	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.6	23.9	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	2.2	2.1	10.0
Ammonical Nitrogen (as N)(mg/L)	0.34	0.33	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	1.92	0.68	100.0
BOD [3 days at 27oC] (mg/L)	7.4	12	30.0
Arsenic(mg/L)	<0.01	<0.01	0.2
Lead(mg/L)	<0.05	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.1	<0.1	2.0
Copper(mg/L)	<0.02	<0.02	3.0
Zinc(mg/L)	1.03	1.35	5.0
Selenium(mg/L)	<0.01	<0.01	0.05
Cadmium(mg/L)	<0.0005	<0.0005	2.0
Nickel(mg/L)	0.25	<0.1	3.0
Fluoride(mg/L)	0.74	0.96	2.0
Sulphide(mg/L)	0.004	0.003	2.0
Phenolic Compound(mg/L)	<0.001	<0.001	1.0
Manganese(mg/L)	2.8	0.88	2.0
Iron(mg/L)	<0.05	<0.05	3.0
Disolved Phosphate(mg/L)	<0.01	0.49	5.0

TABLE:127

22 Parameter Effluent Quality Data Yearly: Lingaraj Area

Project (OCP / UG)	Lingaraj OCP	Lingaraj OCP	
NAME OF THE STATION	Lingraj mine disch.	Outlet of MDTP	MoEF-Sch-VI Standards
Date	27.11.16	30.11.16	
Colour(Hazen)	Acceptable	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.6	23.9	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	1.7	1.8	10.0
Ammonical Nitrogen (as N)(mg/L)	0.21	0.52	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	2.27	1.38	100.0
BOD [3 days at 27oC] (mg/L)	10	8.7	30.0
Arsenic(mg/L)	<0.01	<0.01	0.2
Lead(mg/L)	<0.05	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.1	<0.1	2.0
Copper(mg/L)	<0.02	<0.02	3.0
Zinc(mg/L)	<0.02	<0.02	5.0
Selenium(mg/L)	<0.01	<0.01	0.05
Cadmium(mg/L)	<0.0005	<0.0005	2.0
Nickel(mg/L)	<0.1	<0.1	3.0
Fluoride(mg/L)	1.03	0.71	2.0
Sulphide(mg/L)	0.003	0.004	2.0
Phenolic Compound(mg/L)	<0.001	<0.001	1.0
Manganese(mg/L)	<0.05	<0.05	2.0
Iron(mg/L)	<0.05	<0.05	3.0
Disolved Phosphate(mg/L)	<0.01	0.05	5.0

TABLE: 128

22 Parameter Effluent Quality Data Yearly: Kaniha Area

Project (OCP / UG)	Kaniha OCP	
NAME OF THE STATION	Kaniha mine discharge	MoEF-Sch-VI Standards
Date	27.11.16	
Colour(Hazen)	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.4	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	1.9	10.0
Ammonical Nitrogen (as N)(mg/L)	0.18	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	0.98	100.0
BOD [3 days at 27oC] (mg/L)	10	30.0
Arsenic(mg/L)	<0.01	0.2
Lead(mg/L)	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	0.1
Total Chromium(mg/L)	<0.1	2.0
Copper(mg/L)	<0.02	3.0
Zinc(mg/L)	<0.02	5.0
Selenium(mg/L)	<0.01	0.05
Cadmium(mg/L)	<0.0005	2.0
Nickel(mg/L)	<0.1	3.0
Fluoride(mg/L)	0.91	2.0
Sulphide(mg/L)	0.005	2.0
Phenolic Compound(mg/L)	<0.001	1.0
Manganese(mg/L)	<0.05	2.0
Iron(mg/L)	<0.05	3.0
Disolved Phosphate(mg/L)	<0.01	5.0

TABLE:129

22 Parameter Effluent Quality Data Yearly: Hingula Area

Project (OCP / UG)	Hingula OCP	Balram OCP	
NAME OF THE STATION	Final disch. Point	Mine Discharge Water	MoEF-Sch-VI Standards
Date	27.11.16	27.11.16	
Colour(Hazen)	Acceptable	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.2	23.8	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	1.8	2	10.0
Ammonical Nitrogen (as N)(mg/L)	0.54	0.42	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	0.68	1.14	100.0
BOD [3 days at 27oC] (mg/L)	8.8	14	30.0
Arsenic(mg/L)	<0.01	<0.01	0.2
Lead(mg/L)	<0.05	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.1	<0.1	2.0
Copper(mg/L)	<0.02	<0.02	3.0
Zinc(mg/L)	<0.02	0.6	5.0
Selenium(mg/L)	<0.01	<0.01	0.05
Cadmium(mg/L)	<0.0005	<0.0005	2.0
Nickel(mg/L)	<0.1	<0.1	3.0
Fluoride(mg/L)	1.03	0.96	2.0
Sulphide(mg/L)	0.004	0.003	2.0
Phenolic Compound(mg/L)	<0.001	<0.001	1.0
Manganese(mg/L)	<0.05	<0.05	2.0
Iron(mg/L)	<0.05	<0.05	3.0
Disolved Phosphate(mg/L)	0.61	<0.01	5.0

TABLE:130

22 Parameter Effluent Quality Data Yearly: Talcher Area

Project (OCP / UG)	Talcher	Talcher	Talcher	
NAME OF THE STATION	Talcher colliery mine discharge	Nandira colliery mine discharge	Deulbera colliery mine discharge	MoEF-Sch-VI Standards
Date	27.11.16	27.11.16	27.11.16	
Colour(Hazen)	Acceptable	Acceptable	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.5	23.7	23.6	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	2.1	2	1.9	10.0
Ammonical Nitrogen (as N)(mg/L)	0.24	0.38	0.36	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	2.21	1.66	2.92	100.0
BOD [3 days at 27oC] (mg/L)	8.2	12	14	30.0
Arsenic(mg/L)	<0.01	<0.01	<0.01	0.2
Lead(mg/L)	<0.05	<0.05	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.1	<0.1	<0.1	2.0
Copper(mg/L)	<0.02	<0.02	<0.02	3.0
Zinc(mg/L)	<0.02	<0.02	<0.02	5.0
Selenium(mg/L)	<0.01	<0.01	<0.01	0.05
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	2.0
Nickel(mg/L)	<0.1	<0.1	<0.1	3.0
Fluoride(mg/L)	0.76	0.77	1.03	2.0
Sulphide(mg/L)	0.005	0.004	0.003	2.0
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	1.0
Manganese(mg/L)	0.75	<0.05	<0.05	2.0
Iron(mg/L)	<0.05	<0.05	<0.05	3.0
Disolved Phosphate(mg/L)	0.74	<0.01	<0.01	5.0

TABLE:131

22 Parameter Effluent Quality Data Yearly: Talcher Area

Project (OCP / UG)	Talcher	Talcher	
NAME OF THE STATION	Handhidhua Colliery mine discharge	Rani park Submersible pump	MoEF-Sch-VI Standards
Date	27.11.16	30.11.16	
Colour(Hazen)	Acceptable	Acceptable	Acceptable
Odour	Unobjectionable	Unobjectionable	Unobjectionable
Temperature(^{oC})	23.8	24	Shall not exceed 5 ^{oC} above the receiving temperature
Nitrate Nitrogen(mg/L)	1.8	2.1	10.0
Ammonical Nitrogen (as N)(mg/L)	0.62	0.72	50.0
Total Kjeldahl Nitrogen (as NH3)(mg/L)	1.88	0.92	100.0
BOD [3 days at 27oC] (mg/L)	16	10	30.0
Arsenic(mg/L)	<0.01	<0.01	0.2
Lead(mg/L)	<0.05	<0.05	0.1
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.1
Total Chromium(mg/L)	<0.1	<0.1	2.0
Copper(mg/L)	<0.02	<0.02	3.0
Zinc(mg/L)	<0.02	<0.02	5.0
Selenium(mg/L)	<0.01	<0.01	0.05
Cadmium(mg/L)	<0.0005	<0.0005	2.0
Nickel(mg/L)	<0.1	<0.1	3.0
Fluoride(mg/L)	0.67	0.7	2.0
Sulphide(mg/L)	0.004	0.005	2.0
Phenolic Compound(mg/L)	<0.001	<0.001	1.0
Manganese(mg/L)	<0.05	<0.05	2.0
Iron(mg/L)	<0.05	<0.05	3.0
Disolved Phosphate(mg/L)	<0.01	<0.01	5.0

Table: 132
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Jagannath Colony Tap water	Jagannath Colony tap water (monthly)	Jagannath Colony Tap water	Jagannath Colony tap water		
Dt. of sampling	15.06.2016	14.07.16	12.08.16	15.09.16	Acceptable	Permissible
Colour(Hazen)	3	5	5	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	4	5	1	5
pH	6.62	7.32	7.25	7.28	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56	40	52	52	200	600
Total Hardness(mg/L)	288	76	76	92	200	600
Iron(mg/L)	0.134	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	26	22	16	20	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	480	182	146	166	500	2000
Calcium(mg/L)	75	20.8	19.2	27.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.049	<0.02	0.04	<0.02	0.1	0.3
Sulphate(mg/L)	88	26	28	34	200	400
Nitrate(mg/L)	7.53	4.43	3.99	3.99	45	No relaxation
Fluoride(mg/L)	0.07	0.73	0.31	0.38	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.18	0.05	0.003	No relaxation
Zinc(mg/L)	0.08	<0.02	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.2	<0.2	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	3.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 133
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Jagannath Colony tap water	Jagannath Colony tap water	Jagannath Colony tap water (monthly)	Jagannath Colony tap water (monthly)	Jagannath Colony tap water (monthly)		
Dt. of sampling	15.11.16	8.12.16	14.01.2017	15.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	3	2	2	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	1	2	1	1	5
pH	7.35	7.45	7.15	7.49	7.86	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	12	24	12	20	200	600
Total Hardness(mg/L)	108	108	76	108	144	200	600
Iron(mg/L)	0.06	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	16	16	12	14	12	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	162	164	138	184	256	500	2000
Calcium(mg/L)	27.2	27.2	20.8	28.8	35.2	75	200
Copper(mg/L)	<0.03	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	24	20	34	46	74	200	400
Nitrate(mg/L)	3.99	4.43	2.78	3.17	4.76	45	No relaxation
Fluoride(mg/L)	0.45	0.47	0.56	0.29	0.43	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.02	0.18	0.08	0.14	0.09	0.003	No relaxation
Zinc(mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.2	0.13	<0.2	<0.2	<0.2	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	9.2	6.1	6	6	6.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	1.8	<1.8	2	<1.8	Shall not be detectable in any 100 ml sample	

Table: 134
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Rakas Village well water	Rakas vill. Well water (monthly)	Rakas Village well water	Rakas vill. Well water		
Dt. of sampling	15.06.2016	14.07.16	12.08.16	16.09.16	Acceptable	Permissible
Colour(Hazen)	2	4	3	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	5	3	1	5
pH	6.82	6.98	6.98	7.16	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	84	324	76	192	200	600
Total Hardness(mg/L)	244	360	132	224	200	600
Iron(mg/L)	0.09	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	86	66	60	54	250	1000
Residual Free chlorine(mg/L)	0.12	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	610	622	334	416	500	2000
Calcium(mg/L)	72	60.8	40	65.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.083	<0.02	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	116	19	42	35	200	400
Nitrate(mg/L)	56.4	42.47	18.13	6.76	45	No relaxation
Fluoride(mg/L)	0.08	0.83	0.28	0.28	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.03	0.03	0.003	No relaxation
Zinc(mg/L)	0.025	<0.02	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.2	<0.2	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	***	***	6.9	10	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 135
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Rakas vill. Well water	Rakas vill. Well water	Rakas vill. Well water		
Dt. of sampling	13.10.16	15.11.16	8.12.16	Acceptable	Permissible
Colour(Hazen)	2	3	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	4	4	1	5
pH	7.12	8.02	7.15	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	16	16	200	600
Total Hardness(mg/L)	216	200	256	200	600
Iron(mg/L)	0.07	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	64	22	70	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	362	310	440	500	2000
Calcium(mg/L)	16	54	73.6	75	200
Copper(mg/L)	0.08	<0.03	0.04	0.05	1.5
Manganese(mg/L)	0.1	<0.02	0.04	0.1	0.3
Sulphate(mg/L)	62	72	56	200	400
Nitrate(mg/L)	4.87	4.43	6.76	45	No relaxation
Fluoride(mg/L)	0.34	0.62	0.36	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.02	0.17	0.11	0.003	No relaxation
Zinc(mg/L)	<0.01	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.2	<0.2	0.17	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.001	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.0005	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	17	9.1	4	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	2	3.6	<1.8	Shall not be detectable in any 100 ml sample	

Table: 136
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Rakas vill. Well water (monthly)	Rakas vill. Well water (monthly)	Rakas vill. Well water (monthly)		
Dt. of sampling	14.01.2017	14.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	4	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	1	1	5
pH	7.78	7.39	7.55	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	20	28	200	600
Total Hardness(mg/L)	272	280	280	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	190	74	76	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	828	484	478	500	2000
Calcium(mg/L)	83.2	67.2	60.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.05	0.1	0.3
Sulphate(mg/L)	138	80	86	200	400
Nitrate(mg/L)	9.42	5.87	6.13	45	No relaxation
Fluoride(mg/L)	0.28	0.47	0.48	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	0.15	0.02	0.03	0.003	No relaxation
Zinc(mg/L)	<0.01	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.2	<0.2	<0.2	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.001	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.0005	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	1.8	3.6	6.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 137
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Balanda colony tap water (qrly.)	Balanda colony tap water	Balanda Colony tap Water (qrly.)		
Dt. of sampling	15.07.16	14.10.16	14.01.2017	Acceptable	Permissible
Colour(Hazen)	3	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	1	5
pH	7.2	7.49	6.63	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	84	16	16	200	600
Total Hardness(mg/L)	128	104	88	200	600
Iron(mg/L)	<0.06	0.1	<0.06	0.3	No relaxation
Chloride(mg/L)	14	12	10	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	252	162	160	500	2000
Calcium(mg/L)	28.8	28.8	25.6	75	200
Copper(mg/L)	<0.03	0.08	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.09	<0.02	0.1	0.3
Sulphate(mg/L)	39	26	38	200	400
Nitrate(mg/L)	5.76	4.43	3.99	45	No relaxation
Fluoride(mg/L)	0.35	0.4	0.51	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.27	0.14	0.06	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	17	1.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 138
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Project site office water	Project site office water	Project site office water		
Dt. of sampling	15.16.2016	14.07.16	11.08.16	Acceptable	Permissible
Colour(Hazen)	3	4	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	2	2	1	5
pH	6.7	7.05	7.05	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	192	128	228	200	600
Total Hardness(mg/L)	164	156	156	200	600
Iron(mg/L)	0.298	0.25	<0.06	0.3	No relaxation
Chloride(mg/L)	28	30	30	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	380	354	362	500	2000
Calcium(mg/L)	36.8	35.2	40	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.094	<0.02	0.02	0.1	0.3
Sulphate(mg/L)	46	12	14	200	400
Nitrate(mg/L)	7.53	6.65	7.53	45	No relaxation
Fluoride(mg/L)	0.06	1.1	0.23	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.03	<0.02	0.06	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	Shall not be detectable in any 100 ml sample	

Table: 139
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Project site office water	Project site office water	Project site office water		
Dt. of sampling	15.09.16	13.10.16	13.11.16	Acceptable	Permissible
Colour(Hazen)	6	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	3	1	5
pH	7.36	7.42	7.99	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76	36	32	200	600
Total Hardness(mg/L)	68	148	168	200	600
Iron(mg/L)	<0.06	0.19	<0.06	0.3	No relaxation
Chloride(mg/L)	16	36	34	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	134	320	334	500	2000
Calcium(mg/L)	22.4	30.4	41.6	75	200
Copper(mg/L)	<0.03	0.14	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.09	<0.02	0.1	0.3
Sulphate(mg/L)	14	88	10	200	400
Nitrate(mg/L)	4.43	6.87	6.68	45	No relaxation
Fluoride(mg/L)	0.29	0.63	0.43	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	0.03	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	3.6	6.8	10	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	<1.8	3.5	Shall not be detectable in any 100 ml sample	

Table:140
Drinking Water Quality Data
Area: Jagannath

Project / OCP	ubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Project site office water	Project site office water	Project site office water		
Dt. of sampling	13.01.2017	15.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	2	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	1	1	5
pH	8.04	7.45	7.81	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	40	28	28	200	600
Total Hardness(mg/L)	160	156	212	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	34	30	64	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	290	244	326	500	2000
Calcium(mg/L)	38.4	33.6	60.8	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)	14	8	10	200	400
Nitrate(mg/L)	5.78	6.13	3.99	45	No relaxation
Fluoride(mg/L)	0.61	0.53	0.52	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.09	0.04	0.43	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	2	4	8.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 141
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Naraharipur Tube well water	Naraharipur village Tube well water	Naraharipur Tube well water		
Dt. of sampling	15.06.2016	14.07.16	11.08.16	Acceptable	Permissible
Colour(Hazen)	2	4	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	3	3	1	5
pH	7.08	6.89	6.95	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	198	184	264	200	600
Total Hardness(mg/L)	256	260	268	200	600
Iron(mg/L)	0.138	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	36	32	28	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	392	426	442	500	2000
Calcium(mg/L)	43.2	36.8	46.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.09	<0.02	0.12	0.1	0.3
Sulphate(mg/L)	54	20	34	200	400
Nitrate(mg/L)	6.65	8.42	5.87	45	No relaxation
Fluoride(mg/L)	0.09	1.21	0.26	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	4.06	1.75	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.9	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	1.8	Shall not be detectable in any 100 ml sample	

Table: 142
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Naraharipur village Tube well water	Naraharipur village Tube well water	Naraharipur village Tube well water		
Dt. of sampling	15.09.16	13.10.16	13.11.17	Acceptable	Permissible
Colour(Hazen)	5	2	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	4	1	5
pH	7.17	6.85	7.52	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56	38	40	200	600
Total Hardness(mg/L)	108	224	304	200	600
Iron(mg/L)	<0.06	0.13	<0.06	0.3	No relaxation
Chloride(mg/L)	28	64	52	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	196	360	466	500	2000
Calcium(mg/L)	30.4	67.2	56	75	200
Copper(mg/L)	<0.03	0.14	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.09	<0.02	0.1	0.3
Sulphate(mg/L)	28	40	20	200	400
Nitrate(mg/L)	5.23	6.76	7.87	45	No relaxation
Fluoride(mg/L)	0.44	0.43	0.6	1	1.5
Selenium(mg/L)	<0.002	<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	0.007	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	<0.02	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	3.6	6.8	9.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	<1.8	2	Shall not be detectable in any 100 ml sample	

Table: 143
Drinking Water Quality Data
Area: Jagannath

Project / OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Naraharipur village Tube well water	Naraharipur village Tube well water	Naraharipur village Tube well water	Naraharipur village Tube well water		
Dt. of sampling	9.12.16	13.01.2017	15.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	2	3	4	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	7.24	7.8	6.93	7.68	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	36	24	32	200	600
Total Hardness(mg/L)	184	252	260	316	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	38	36	38	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	284	366	348	412	500	2000
Calcium(mg/L)	43.2	48	46.4	48	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)	54	10	10	14	200	400
Nitrate(mg/L)	5.76	5.87	5.87	5.76	45	No relaxation
Fluoride(mg/L)	0.52	0.29	0.49	0.43	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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.057	1.51	2.96	0.13	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.15	<0.2	<0.2	<0.20	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	12	3.6	6.1	6.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	<1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 144
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Hensmul Village well water	Hensmul village Well water	Hensmul Village well water	Hensmul village Well water		
Dt. of sampling	15.06.2016	15.07.16	11.08.16	16.09.16	Acceptable	Permissible
Colour(Hazen)	3	2	5	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	3	4	2	1	5
pH	7.7	6.75	7.22	6.61	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	80	152	80	192	200	600
Total Hardness(mg/L)	448	188	272	208	200	600
Iron(mg/L)	0.162	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	30	46	22	54	250	1000
Residual Free chlorine(mg/L)	0.13	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	738	368	458	388	500	2000
Calcium(mg/L)	132.8	48	83.2	60.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.025	<0.02	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	164	42	96	35	200	400
Nitrate(mg/L)	9.3	4.43	5.37	4.87	45	No relaxation
Fluoride(mg/L)	0.22	0.52	0.18	0.51	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.06	<0.02	0.08	0.11	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 145
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Hensmul village Well water	Hensmul village Well water	Hensmul village Well water		
Dt. of sampling	13.10.16	15.11.16	8.12.16	Acceptable	Permissible
Colour(Hazen)	3	3	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	3	1	5
pH	6.66	7.31	7.42	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	52	16	16	200	600
Total Hardness(mg/L)	216	228	260	200	600
Iron(mg/L)	0.16	<0.06	0.06	0.3	No relaxation
Chloride(mg/L)	70	56	60	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	384	390	442	500	2000
Calcium(mg/L)	62.4	67.2	75.2	75	200
Copper(mg/L)	0.09	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.1	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	32	78	84	200	400
Nitrate(mg/L)	4.87	4.78	6.47	45	No relaxation
Fluoride(mg/L)	0.22	0.63	0.52	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	<0.02	0.154	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.12	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	26	9.1	12	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	12	2	1.8	Shall not be detectable in any 100 ml sample	

Table: 146
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Hensmul village Well water	Hensmul village Well water	Hensmul village Well water		
Dt. of sampling	13.01.2017	15.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	2	4	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	2	1	5
pH	8.24	7.59	7.01	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	28	16	200	600
Total Hardness(mg/L)	304	580	252	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	54	226	158	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	448	1020	628	500	2000
Calcium(mg/L)	56	153.6	81.6	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)	12	168	128	200	400
Nitrate(mg/L)	6.78	6.87	6.13	45	No relaxation
Fluoride(mg/L)	0.33	0.26	0.46	1	1.5
Selenium(mg/L)	0.004	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.68	0.04	0.03	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	2	3.7	6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 147
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Ananta colony tap water	Ananta colony tap water	Ananta Clony tap water		
Dt. of sampling	12.08.16	15.11.16	15.02.2017	Acceptable	Permissible
Colour(Hazen)	2	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	2	2	1	5
pH	7.4	7.3	7.3	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	32	12	8	200	600
Total Hardness(mg/L)	56	72	88	200	600
Iron(mg/L)	<0.06	0.12	<0.06	0.3	No relaxation
Chloride(mg/L)	18	16	16	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	122	126	138	500	2000
Calcium(mg/L)	16	19.2	20.8	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)	24	18	22	200	400
Nitrate(mg/L)	3.1	3.99	3.17	45	No relaxation
Fluoride(mg/L)	0.26	0.37	0.43	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.05	0.39	0.1	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.9	9.2	2	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	3.4	<1.8	Shall not be detectable in any 100 ml sample	

Table: 148
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Dera Village Tube well water	Dera village Tube well water	Dera Village Tube well water	Dera village Tube well water		
Dt. of sampling	15.06.2016	15.07.16	11.08.16	16.09.16	Acceptable	Permissible
Colour(Hazen)	5	4	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	5	3	3	2	1	5
pH	7.53	6.85	7.35	6.75	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	52	68	72	64	200	600
Total Hardness(mg/L)	108	128	132	96	200	600
Iron(mg/L)	0.155	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	30	62	48	30	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	236	298	286	206	500	2000
Calcium(mg/L)	33.6	32	38.4	27.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.067	<0.02	0.02	<0.02	0.1	0.3
Sulphate(mg/L)	52	26	36	40	200	400
Nitrate(mg/L)	5.76	7.53	4.87	4.43	45	No relaxation
Fluoride(mg/L)	0.14	0.34	0.21	0.54	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.03	0.14	0.52	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	11	Shall not be detectable in any 100 ml sample	

Table: 149
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Dera village Tube well water	Dera village Tube well water	Dera village Tube well water		
Dt. of sampling	13.10.16	15.11.16	8.12.16	Acceptable	Permissible
Colour(Hazen)	5	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	2	1	1	5
pH	7.01	7.1	6.71	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	208	12	12	200	600
Total Hardness(mg/L)	316	60	140	200	600
Iron(mg/L)	0.21	0.25	<0.06	0.3	No relaxation
Chloride(mg/L)	22	16	50	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	880	106	276	500	2000
Calcium(mg/L)	89.6	16	36.8	75	200
Copper(mg/L)	0.09	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.24	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	168	14	38	200	400
Nitrate(mg/L)	9.67	3.99	4.78	45	No relaxation
Fluoride(mg/L)	0.67	0.53	0.46	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.63	0.07	0.031	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.13	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	22	12	11	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	10	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table:150
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Ananta OCP	Ananta OCP	Ananta OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Dera village Tube well water	Dera village Tube well water	Dera village Tube well water		
Dt. of sampling	13.01.2017	14.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	2	2	8	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	4	6	1	5
pH	7.87	7.34	6.8	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	20	24	200	600
Total Hardness(mg/L)	136	140	148	200	600
Iron(mg/L)	<0.06	0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	54	46	48	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	264	268	254	500	2000
Calcium(mg/L)	40	40	41.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.02	0.04	0.1	0.3
Sulphate(mg/L)	43	40	38	200	400
Nitrate(mg/L)	5.37	4.78	5.87	45	No relaxation
Fluoride(mg/L)	0.55	0.52	0.51	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.17	0.14	0.12	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	2	4	5.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 151
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	**Bharatpur OCP**	**Bharatpur OCP**	**Bharatpur OCP**	**Bharatpur OCP**	**Indian Drinking Standards (IS-10500):2012**	
Monitoring Station	**Tap water NS nagar**	**Tap water in Nehru Satabdi nagar**	Tap water in Nehru Satabdi Nagar	**Tap water in Nehru satabadi nagar**		
Dt. of sampling	**14.06.2016**	**16.09.16**	8.12.16	**15.03.2017**	**Acceptable**	**Permissible**
Colour(Hazen)	**2**	**2**	1	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	**7.28**	**6.76**	7.34	7.78	**6.5-8.5**	**No relaxation**
Total Alkalinity(mg/L)	**52**	**20**	12	16	**200**	**600**
Total Hardness(mg/L)	**64**	**48**	64	92	**200**	**600**
Iron(mg/L)	**0.291**	**<0.06**	0.06	<0.06	**0.3**	**No relaxation**
Chloride(mg/L)	**18**	**16**	12	22	**250**	**1000**
Residual Free chlorine(mg/L)	**<0.04**	**<1.0**	<1.0	<1.0	**0.2**	**1**
Total Dissolve Solid(mg/L)	**149**	**102**	110	170	**500**	**2000**
Calcium(mg/L)	**14.4**	**14.4**	16	22.4	**75**	**200**
Copper(mg/L)	**<0.03**	**<0.03**	<0.03	<0.03	**0.05**	**1.5**
Manganese(mg/L)	**0.026**	**<0.02**	0.206	<0.02	**0.1**	**0.3**
Sulphate(mg/L)	**22**	**25**	18	21	**200**	**400**
Nitrate(mg/L)	**5.76**	**3.99**	3.99	4.43	**45**	**No relaxation**
Fluoride(mg/L)	**0.12**	**0.34**	0.37	0.58	**1**	**1.5**
Selenium(mg/L)	**<0.002**	**<0.002**	<0.002	<0.002	**0.01**	**No relaxation**
Arsenic(mg/L)	**<0.005**	**<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**
Cadmium(mg/L)	**<0.0005**	**<0.0005**	<0.0005	<0.0005	**0.003**	**No relaxation**
Zinc(mg/L)	**0.07**	**<0.02**	0.083	0.15	**5**	**15**
Hexavelent Chromium(mg/L)	**<0.01**	**<0.01**	<0.01	<0.01	**0.05 (Indian Drinking Standards (IS-10500):1991)**	**No relaxation (Indian Drinking Standards (IS-10500):1991)**
Boron(mg/L)	**<0.2**	**<0.2**	0.09	<0.2	**0.5**	**1**
Phenolics(mg/L)	**<0.001**	**<0.001**	<0.001	<0.001	**0.001**	**0.002**
Total Coliform as TC (MPN/100ml)	*******	**22**	10	5.5	**Shall not be detectable in any 100 ml sample**	
Faecal Coliform as FC (MPN/100ml)	*******	**10**	3.6	1.8	**Shall not be detectable in any 100 ml sample**	

Table: 152
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	**Bharatpur OCP**	**Bharatpur OCP**	**Bharatpur OCP**	**Bharatpur OCP**	**Indian Drinking Standards (IS-10500):2012**	
Monitoring Station	**Badasinga Village**	**Badasinga village**	Badasinga village	**Badasinga villge**		
Dt. of sampling	**14.06.2016**	**16.09.16**	8.12.16	**15.03.2017**	**Acceptable**	**Permissible**
Colour(Hazen)	**3**	**4**	4	6	**5**	**15**
Odour	**Agreeable**	**Agreeable**	Agreeable	Agreeable	**Agreeable**	**Agreeable**
Taste	**Agreeable**	**Agreeable**	Agreeable	Agreeable	**Agreeable**	**Agreeable**
Turbidity(NTU)	**2**	**3**	3	2	**1**	**5**
pH	**7.11**	**6.68**	7.18	7.35	**6.5-8.5**	**No relaxation**
Total Alkalinity(mg/L)	**60**	**104**	24	28	**200**	**600**
Total Hardness(mg/L)	**64**	**240**	260	260	**200**	**600**
Iron(mg/L)	**0.295**	**<0.06**	<0.06	<0.06	**0.3**	**No relaxation**
Chloride(mg/L)	**20**	**150**	200	150	**250**	**1000**
Residual Free chlorine(mg/L)	**<0.04**	**<1.0**	<1.0	<1.0	**0.2**	**1**
Total Dissolve Solid(mg/L)	**168**	**698**	892	587	**500**	**2000**
Calcium(mg/L)	**19.2**	**68**	75.2	80	**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)	**54**	**68**	216	132	**200**	**400**
Nitrate(mg/L)	**4.43**	**8.42**	19.18	5.76	**45**	**No relaxation**
Fluoride(mg/L)	**0.21**	**0.41**	0.28	0.43	**1**	**1.5**
Selenium(mg/L)	**<0.002**	**<0.002**	<0.002	<0.002	**0.01**	**No relaxation**
Arsenic(mg/L)	**<0.005**	**<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**
Cadmium(mg/L)	**<0.0005**	**<0.0005**	<0.0005	<0.0005	**0.003**	**No relaxation**
Zinc(mg/L)	**<0.02**	**<0.02**	0.041	0.07	**5**	**15**
Hexavelent Chromium(mg/L)	**<0.01**	**<0.01**	<0.01	<0.01	**0.05 (Indian Drinking Standards (IS-10500):1991)**	**No relaxation (Indian Drinking Standards (IS-10500):1991)**
Boron(mg/L)	**<0.2**	**<0.2**	0.21	<0.2	**0.5**	**1**
Phenolics(mg/L)	**<0.001**	**<0.001**	<0.001	<0.001	**0.001**	**0.002**
Total Coliform as TC (MPN/100ml)	*******	**10**	15	4	**Shall not be detectable in any 100 ml sample**	
Faecal Coliform as FC (MPN/100ml)	*******	**3.6**	1.8	<1.8	**Shall not be detectable in any 100 ml sample**	

Table: 153
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Bharatpur OCP	Bharatpur OCP	Bharatpur OCP	Bharatpur OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Time Ofice,BOCP	Time office, BOCP	Time office BOCP	Time Office, BOCP		
Dt. of sampling	14.06.2016	16.09.16	8.12.16	15.03.2017	Acceptable	Permissible
Colour(Hazen)	2	2	1	2	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	7.21	6.82	7.11	7.43	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	72	8	32	200	600
Total Hardness(mg/L)	108	112	112	344	200	600
Iron(mg/L)	0.239	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	24	14	70	250	1000
Residual Free chlorine(mg/L)	0.1	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	315	208	176	528	500	2000
Calcium(mg/L)	27.2	28.8	28.8	59.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.021	<0.02	<0.02	0.04	0.1	0.3
Sulphate(mg/L)	106	41	28	61	200	400
Nitrate(mg/L)	4.43	4.43	4.78	5.47	45	No relaxation
Fluoride(mg/L)	0.31	0.39	0.33	0.38	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.04	0.02	0.038	0.3	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.08	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total Coliform as TC (MPN/100ml)	***	10	11	6.1	Shall not be detectable in any 100 ml sample	
Faecal Coliform as FC (MPN/100ml)	***	3.6	1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 154
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Borewell water at site office	Bore well water at site office	Borewell water at site office		
Dt. of sampling	03.06.2016	02.07.16	05.08.16	Acceptable	Permissible
Colour(Hazen)	3	3	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	4	2	1	5
pH	7.82	6.86	7.57	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	104	64	44	200	600
Total Hardness(mg/L)	264	168	96	200	600
Iron(mg/L)	0.284	0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	150	54	18	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	582	328	186	500	2000
Calcium(mg/L)	84.8	48	27.2	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.035	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	74	40	44	200	400
Nitrate(mg/L)	9.3	5.76	3.99	45	No relaxation
Fluoride(mg/L)	0.19	0.29	0.34	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.07	0.23	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.9	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	1.8	Shall not be detectable in any 100 ml sample	

Table: 155
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Bore well water at site office	Bore well water at site office	Bore well water at site office		
Dt. of sampling	07.09.16	04.10.16	03.11.16	Acceptable	Permissible
Colour(Hazen)	4	3	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	4	2	1	5
pH	6.89	7.14	6.85	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	100	38	24	200	600
Total Hardness(mg/L)	236	224	208	200	600
Iron(mg/L)	<0.06	0.15	<0.06	0.3	No relaxation
Chloride(mg/L)	110	86	98	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	474	420	398	500	2000
Calcium(mg/L)	73.6	72	60.8	75	200
Copper(mg/L)	<0.03	0.1	<0.03	0.05	1.5
Manganese(mg/L)	0.08	0.09	<0.02	0.1	0.3
Sulphate(mg/L)	17	52	34	200	400
Nitrate(mg/L)	5.37	7.53	4.43	45	No relaxation
Fluoride(mg/L)	0.38	0.56	0.71	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.18	0.02	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	3.6	22	10	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	7.8	6	<1.8	Shall not be detectable in any 100 ml sample	

Table: 156
Drinking Water Quality Data
Area: Bharatpur

Project / OCP	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Bore well water at site office	Bore well water at site office	Bore well water at site office	Bore well water at site office		
Dt. of sampling	3.12.16	03.01.2017	04.02.2017	04.03.2017	Acceptable	Permissible
Colour(Hazen)	5	2	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	1	1	1	5
pH	7.35	6.66	7.25	7.83	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	24	16	16	200	600
Total Hardness(mg/L)	884	212	252	292	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	464	130	140	162	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	1790	424	480	518	500	2000
Calcium(mg/L)	249.6	60.8	78.4	97.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.04	0.02	0.05	0.1	0.3
Sulphate(mg/L)	198	25	29	22	200	400
Nitrate(mg/L)	18.47	5.87	5.87	4.43	45	No relaxation
Fluoride(mg/L)	0.67	0.41	0.41	0.28	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	0.009	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.103	0.14	0.04	0.08	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.15	<0.2	<0.2	<0.20	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	12	4	4	6.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 157
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingaraj OCP	Lingraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Balunga khamar vill well	well from Balunga khamar village		
Dt. of sampling	14.06.2016	15.09.16	Acceptable	Permissible
Colour(Hazen)	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	5	1	5
pH	7.41	7.02	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56	60	200	600
Total Hardness(mg/L)	96	296	200	600
Iron(mg/L)	0.288	<0.06	0.3	No relaxation
Chloride(mg/L)	50	286	250	1000
Residual Free chlorine(mg/L)	0.1	<1.0	0.2	1
Total Dissolve Solid(mg/L)	262	1068	500	2000
Calcium(mg/L)	27.2	80	75	200
Copper(mg/L)	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.082	<0.02	0.1	0.3
Sulphate(mg/L)	48	94	200	400
Nitrate(mg/L)	6.65	18.13	45	No relaxation
Fluoride(mg/L)	0.37	0.43	1	1.5
Selenium(mg/L)	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.07	0.08	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Total Coliform as TC (MPN/100ml)	***	1.8	Shall not be detectable in any 100 ml sample	
Faecal Coliform as FC (MPN/100ml)	***	<1.8	Shall not be detectable in any 100 ml sample	

Table: 158
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingaraj OCP	Lingaraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	MTK office Tap Water LOCP	MTK office tap water, LOCP		
Dt. of sampling	14.06.2016	14.10.16	Acceptable	Permissible
Colour(Hazen)	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	1	5
pH	7.55	7.36	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	48	20	200	600
Total Hardness(mg/L)	52	56	200	600
Iron(mg/L)	0.129	0.19	0.3	No relaxation
Chloride(mg/L)	22	14	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	0.2	1
Total Dissolve Solid(mg/L)	206	86	500	2000
Calcium(mg/L)	14.4	14.4	75	200
Copper(mg/L)	<0.03	0.09	0.05	1.5
Manganese(mg/L)	0.089	0.08	0.1	0.3
Sulphate(mg/L)	64	8	200	400
Nitrate(mg/L)	3.99	1.2	45	No relaxation
Fluoride(mg/L)	0.25	0.7	1	1.5
Selenium(mg/L)	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.05	0.13	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Total Coliform as TC (MPN/100ml)	***	17	Shall not be detectable in any 100 ml sample	
Faecal Coliform as FC (MPN/100ml)	***	2	Shall not be detectable in any 100 ml sample	

Table: 159
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingaraj OCP	Lingraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Lingaraj township tap water	Lingaraj township tap water		
Dt. of sampling	14.07.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	1	5
pH	6.79	7.35	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	12	200	600
Total Hardness(mg/L)	56	64	200	600
Iron(mg/L)	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	22	12	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	144	112	500	2000
Calcium(mg/L)	14.4	16	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)	20	20	200	400
Nitrate(mg/L)	3.99	2.76	45	No relaxation
Fluoride(mg/L)	0.34	0.34	1	1.5
Selenium(mg/L)	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.25	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Total Coliform as TC (MPN/100ml)	***	6.1	Shall not be detectable in any 100 ml sample	
Faecal Coliform as FC (MPN/100ml)	***	<1.8	Shall not be detectable in any 100 ml sample	

Table: 160
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingaraj OCP	Lingaraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	well from Deulbera Village	well from Deulbera Village		
Dt. of sampling	14.07.16	14.10.16	Acceptable	Permissible
Colour(Hazen)	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	5
pH	6.61	7.27	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	140	24	200	600
Total Hardness(mg/L)	192	184	200	600
Iron(mg/L)	<0.06	0.12	0.3	No relaxation
Chloride(mg/L)	42	42	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	394	330	500	2000
Calcium(mg/L)	54.4	56	75	200
Copper(mg/L)	<0.03	0.09	0.05	1.5
Manganese(mg/L)	<0.02	0.07	0.1	0.3
Sulphate(mg/L)	48	64	200	400
Nitrate(mg/L)	5.76	8.42	45	No relaxation
Fluoride(mg/L)	0.24	0.58	1	1.5
Selenium(mg/L)	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Total Coliform as TC (MPN/100ml)	***	12	Shall not be detectable in any 100 ml sample	
Faecal Coliform as FC (MPN/100ml)	***	6	Shall not be detectable in any 100 ml sample	

Table: 161
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Deulbera colony tap water		
Dt. of sampling	15.09.16	Acceptable	Permissible
Colour(Hazen)	2	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	5
pH	6.72	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	52	200	600
Total Hardness(mg/L)	104	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	18	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	194	500	2000
Calcium(mg/L)	30.4	75	200
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.1	0.3
Sulphate(mg/L)	46	200	400
Nitrate(mg/L)	3.99	45	No relaxation
Fluoride(mg/L)	0.29	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
Cadmium(mg/L)	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.03	5	15
Hexavelent Chromium(mg/L)	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	0.5	1
Phenolics(mg/L)	<0.001	0.001	0.002
Total Coliform as TC (MPN/100ml)	3.6	Shall not be detectable in any 100 ml sample	
Faecal Coliform as FC (MPN/100ml)	7.8	Shall not be detectable in any 100 ml sample	

Table: 162
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Tap water GM office		
Dt. of sampling	13.08.16	Acceptable	Permissible
Colour(Hazen)	5	5	15
Odour	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	5
pH	7.75	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	200	600
Total Hardness(mg/L)	44	200	600
Iron(mg/L)	<0.06	0.3	No relaxation
Chloride(mg/L)	16	250	1000
Residual Free chlorine(mg/L)	<1.0	0.2	1
Total Dissolve Solid(mg/L)	98	500	2000
Calcium(mg/L)	12.8	75	200
Copper(mg/L)	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.1	0.3
Sulphate(mg/L)	18	200	400
Nitrate(mg/L)	3.1	45	No relaxation
Fluoride(mg/L)	0.2	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
Cadmium(mg/L)	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	0.5	1
Phenolics(mg/L)	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	Shall not be detectable in any 100 ml sample	

Table: 163
Drinking Water Quality Data
Area: Lingaraj

Project / OCP	Lingraj OCP	Lingraj OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Well from Talabera	well from Talabera village		
Dt. of sampling	13.08.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	3	1	5
pH	7.45	7.41	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	304	24	200	600
Total Hardness(mg/L)	384	232	200	600
Iron(mg/L)	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	108	56	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	774	384	500	2000
Calcium(mg/L)	100.8	67.2	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)	78	38	200	400
Nitrate(mg/L)	7.53	5.62	45	No relaxation
Fluoride(mg/L)	0.31	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
Cadmium(mg/L)	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.8	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 164
Drinking Water Quality Data
Area: Hingula

Project / OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Project / Site Office Tube well water	Project office /site ofice tube well water	Project / Site Office Tube well water	Project office tube well water		
Dt. of sampling	07.06.2016	15.07.16	11.08.16	12.09.16	Acceptable	Permissible
Colour(Hazen)	3	4	4	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	3	5	1	5
pH	7.21	6.75	7.52	7.45	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	60	76	284	340	200	600
Total Hardness(mg/L)	116	148	348	424	200	600
Iron(mg/L)	0.292	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	24	26	48	38	250	1000
Residual Free chlorine(mg/L)	0.05	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	290	292	666	688	500	2000
Calcium(mg/L)	40	43.2	64	72	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.092	<0.02	<0.02	0.1	0.1	0.3
Sulphate(mg/L)	72	55	38	18	200	400
Nitrate(mg/L)	6.65	6.65	8.42	7.53	45	No relaxation
Fluoride(mg/L)	0.16	0.53	0.31	0.61	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.02	0.52	0.003	No relaxation
Zinc(mg/L)	0.06	0.26	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.2	<0.2	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	6.9	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 165
Drinking Water Quality Data
Area: Hingula

Project / OCP	**Kaniha OCP**	**Kaniha OCP**	**Kaniha OCP**	**Indian Drinking Standards (IS-10500):2012**	
Monitoring Station	**Project office / Site office tube well water**	**Site office tube well water**	**Project office tube well water**		
Dt. of sampling	**08.10.16**	**08.11.16**	**8.12.16**	**Acceptable**	**Permissible**
Colour(Hazen)	**4**	**3**	3	**5**	**15**
Odour	**Agreeable**	**Agreeable**	Agreeable	**Agreeable**	**Agreeable**
Taste	**Agreeable**	**Agreeable**	Agreeable	**Agreeable**	**Agreeable**
Turbidity(NTU)	**3**	**4**	2	**1**	**5**
pH	**7.78**	**7.97**	8.02	**6.5-8.5**	**No relaxation**
Total Alkalinity(mg/L)	**88**	**52**	40	**200**	**600**
Total Hardness(mg/L)	**352**	**376**	356	**200**	**600**
Iron(mg/L)	**0.11**	**<0.06**	<0.06	**0.3**	**No relaxation**
Chloride(mg/L)	**172**	**40**	44	**250**	**1000**
Residual Free chlorine(mg/L)	**<1.0**	**<1.0**	<1.0	**0.2**	**1**
Total Dissolve Solid(mg/L)	**930**	**634**	624	**500**	**2000**
Calcium(mg/L)	**40**	**72**	60.8	**75**	**200**
Copper(mg/L)	**0.09**	**<0.03**	<0.03	**0.05**	**1.5**
Manganese(mg/L)	**0.07**	**<0.02**	0.519	**0.1**	**0.3**
Sulphate(mg/L)	**188**	**36**	110	**200**	**400**
Nitrate(mg/L)	**18.3**	**7.18**	6.68	**45**	**No relaxation**
Fluoride(mg/L)	**0.63**	**0.38**	0.45	**1**	**1.5**
Selenium(mg/L)	**<0.002**	**<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**
Cadmium(mg/L)	**0.02**	**1.94**	0.264	**0.003**	**No relaxation**
Zinc(mg/L)	**<0.01**	**<0.01**	<0.01	**5**	**15**
Hexavelent Chromium(mg/L)	**<0.2**	**<0.2**	0.07	**0.05 (Indian Drinking Standards (IS-10500):1991)**	**No relaxation (Indian Drinking Standards (IS-10500):1991)**
Boron(mg/L)	**<0.001**	**<0.001**	<0.001	**0.5**	**1**
Phenolics(mg/L)	**<0.0005**	**<0.0005**	<0.0005	**0.001**	**0.002**
Total coliform As MPN/100ml	**15**	**6.1**	9.1	**Shall not be detectable in any 100 ml sample**	
Fecal Coliform As MPN/100ml	**6**	**1.8**	1.8	**Shall not be detectable in any 100 ml sample**	

Table: 166
Drinking Water Quality Data
Area: Hingula

Project / OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Project office tube well water	Project office tube well water	Project office tube well water		
Dt. of sampling	11.01.2017	15.02.2017	10.03.2017	Acceptable	Permissible
Colour(Hazen)	1	2	6	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	4	1	5
pH	8.16	7.63	8.07	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	40	52	68	200	600
Total Hardness(mg/L)	272	384	392	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	36	42	42	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	448	598	568	500	2000
Calcium(mg/L)	57.6	43.2	54.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.02	0.04	0.1	0.3
Sulphate(mg/L)	22	40	27	200	400
Nitrate(mg/L)	6.76	9.68	10.74	45	No relaxation
Fluoride(mg/L)	0.62	0.43	0.27	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	0.35	2.22	1.14	0.003	No relaxation
Zinc(mg/L)	<0.01	<0.01	<0.01	5	15
Hexavelent Chromium(mg/L)	<0.2	<0.2	<0.20	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.001	<0.001	<0.001	0.5	1
Phenolics(mg/L)	<0.0005	<0.0005	<0.0005	0.001	0.002
Total coliform As MPN/100ml	6.1	3.6	4	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 167
Drinking Water Quality Data
Area: Hingula

Project / OCP	**Kaniha OCP**	**Kaniha OCP**	**Kaniha OCP**	**Kaniha OCP**	**Indian Drinking Standards (IS-10500):2012**	
Monitoring Station	**Jarda village Well Water**	**Jarda village well water**	**Jarda village well water**	**Jarda village well water**		
Dt. of sampling	**07.06.2016**	**15.09.16**	**8.12.16**	**10.03.2017**	**Acceptable**	**Permissible**
Colour(Hazen)	**2**	**5**	2	4	**5**	**15**
Odour	**Agreeable**	**Agreeable**	Agreeable	Agreeable	**Agreeable**	**Agreeable**
Taste	**Agreeable**	**Agreeable**	Agreeable	Agreeable	**Agreeable**	**Agreeable**
Turbidity(NTU)	**3**	**4**	3	2	**1**	**5**
pH	**7.35**	**7.22**	7.2	7.31	**6.5-8.5**	**No relaxation**
Total Alkalinity(mg/L)	**164**	**304**	28	28	**200**	**600**
Total Hardness(mg/L)	**200**	**268**	332	316	**200**	**600**
Iron(mg/L)	**0.069**	**<0.06**	<0.06	<0.06	**0.3**	**No relaxation**
Chloride(mg/L)	**22**	**158**	166	142	**250**	**1000**
Residual Free chlorine(mg/L)	**<0.04**	**<1.0**	<1.0	<1.0	**0.2**	**1**
Total Dissolve Solid(mg/L)	**334**	**886**	706	574	**500**	**2000**
Calcium(mg/L)	**54.4**	**80**	102.4	86.4	**75**	**200**
Copper(mg/L)	**<0.03**	**<0.03**	<0.03	<0.03	**0.05**	**1.5**
Manganese(mg/L)	**<0.02**	**0.03**	<0.02	0.05	**0.1**	**0.3**
Sulphate(mg/L)	**46**	**34**	126	63	**200**	**400**
Nitrate(mg/L)	**7.53**	**8.42**	9.76	5.76	**45**	**No relaxation**
Fluoride(mg/L)	**0.11**	**0.59**	0.24	0.34	**1**	**1.5**
Selenium(mg/L)	**<0.002**	**<0.002**	<0.002	<0.002	**0.01**	**No relaxation**
Arsenic(mg/L)	**<0.005**	**<0.002**	<0.002	<0.002	**0.01**	**0.05**
Lead(mg/L)	**<0.005**	**<0.005**	<0.005	0.007	**0.01**	**No relaxation**
Cadmium(mg/L)	**<0.0005**	**<0.0005**	<0.0005	<0.0005	**0.003**	**No relaxation**
Zinc(mg/L)	**0.04**	**0.06**	0.756	0.09	**5**	**15**
Hexavelent Chromium(mg/L)	**<0.01**	**<0.01**	<0.01	<0.01	**0.05 (Indian Drinking Standards (IS-10500):1991)**	**No relaxation (Indian Drinking Standards (IS-10500):1991)**
Boron(mg/L)	**<0.2**	**<0.2**	0.09	<0.20	**0.5**	**1**
Phenolics(mg/L)	**<0.001**	**<0.001**	<0.001	<0.001	**0.001**	**0.002**
Total coliform As MPN/100ml	***	**3.6**	9.2	2	**Shall not be detectable in any 100 ml sample**	
Fecal Coliform As MPN/100ml	***	**<1.8**	<1.8	<1.8	**Shall not be detectable in any 100 ml sample**	

Table: 167
Drinking Water Quality Data
Area: Hingula

Project / OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Jamunia village well water	Jamunia village well water	Jamunia Villge Well Water		
Dt. of sampling	14.07.16	08.10.16	11.01.2017	Acceptable	Permissible
Colour(Hazen)	2	5	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	4	2	1	5
pH	7.21	7.69	7.86	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	212	16	24	200	600
Total Hardness(mg/L)	344	260	320	200	600
Iron(mg/L)	<0.06	0.09	<0.06	0.3	No relaxation
Chloride(mg/L)	54	130	158	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	578	566	598	500	2000
Calcium(mg/L)	96	81.6	91.2	75	200
Copper(mg/L)	<0.03	0.09	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.07	<0.02	0.1	0.3
Sulphate(mg/L)	45	122	66	200	400
Nitrate(mg/L)	7.53	7.85	5.37	45	No relaxation
Fluoride(mg/L)	0.82	0.49	0.53	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	0.08	0.09	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml		15	2	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml		2	<1.8	Shall not be detectable in any 100 ml sample	

Table: 168
Drinking Water Quality Data
Area: Hingula

Project / OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Kansamunda Village Well Water	Kansamunda village well water	Kansamunda village well water		
Dt. of sampling	11.08.16	08.11.16	15.02.2017	Acceptable	Permissible
Colour(Hazen)	3	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	3	1	1	5
pH	7.32	7.61	7.74	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	284	28	24	200	600
Total Hardness(mg/L)	300	292	276	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	96	152	134	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	646	594	520	500	2000
Calcium(mg/L)	62.4	83.2	76.8	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)	44	84	68	200	400
Nitrate(mg/L)	6.65	6.68	5.37	45	No relaxation
Fluoride(mg/L)	0.24	0.41	0.51	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.03	1.26	0.11	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.8	6.1	6.1	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	2	1.8	Shall not be detectable in any 100 ml sample	

Table: 169
Drinking Water Quality Data
Area: Hingula

Project / OCP	Balram OCP	Balram OCP	Balram OCP	Balaram OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Balram colony tap water	Balaram Colony tap water	Balram colony tap water	Balaram Colony tap water		
Dt. of sampling	14.06.2016	15.07.16	12.08.16	15.09.16	Acceptable	Permissible
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	3	3	7	1	5
pH	7.21	7.29	6.92	7.1	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	56	68	88	88	200	600
Total Hardness(mg/L)	416	240	320	272	200	600
Iron(mg/L)	0.276	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	34	22	26	28	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	568	412	518	438	500	2000
Calcium(mg/L)	83.2	56	70.4	64	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.9	<0.02	<0.02	0.11	0.1	0.3
Sulphate(mg/L)	68	72	112	94	200	400
Nitrate(mg/L)	4.43	4.76	5.37	4.87	45	No relaxation
Fluoride(mg/L)	0.32	0.53	0.54	0.48	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.07	0.17	<0.02	0.08	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	3.6	10	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	7.8	Shall not be detectable in any 100 ml sample	

Table: 170
Drinking Water Quality Data
Area: Hingula

Project / OCP	Balaram OCP	Balaram OCP	Balram OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	**Balaram Colony tap water**	**Balaram Colony tap water**	**Balaram Colony tap water**		
Dt. of sampling	14.10.16	13.11.16	**8.12.16**	**Acceptable**	**Permissible**
Colour(Hazen)	3	2	2	**5**	**15**
Odour	Agreeable	Agreeable	Agreeable	**Agreeable**	**Agreeable**
Taste	Agreeable	Agreeable	Agreeable	**Agreeable**	**Agreeable**
Turbidity(NTU)	2	2	2	**1**	**5**
pH	7.55	7.49	7.76	**6.5-8.5**	**No relaxation**
Total Alkalinity(mg/L)	24	12	16	**200**	**600**
Total Hardness(mg/L)	264	288	296	**200**	**600**
Iron(mg/L)	0.1	<0.06	<0.06	**0.3**	**No relaxation**
Chloride(mg/L)	20	26	26	**250**	**1000**
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	**0.2**	**1**
Total Dissolve Solid(mg/L)	388	418	450	**500**	**2000**
Calcium(mg/L)	64	62.4	59.2	**75**	**200**
Copper(mg/L)	0.08	<0.03	0.058	**0.05**	**1.5**
Manganese(mg/L)	0.07	<0.02	<0.02	**0.1**	**0.3**
Sulphate(mg/L)	70	78	88	**200**	**400**
Nitrate(mg/L)	5.67	4.43	5.62	**45**	**No relaxation**
Fluoride(mg/L)	0.8	0.4	0.38	**1**	**1.5**
Selenium(mg/L)	<0.002	<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**
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	**0.003**	**No relaxation**
Zinc(mg/L)	0.03	<0.02	0.12	**5**	**15**
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	**0.05 (Indian Drinking Standards (IS-10500):1991)**	**No relaxation (Indian Drinking Standards (IS-10500):1991)**
Boron(mg/L)	<0.2	<0.2	0.24	**0.5**	**1**
Phenolics(mg/L)	<0.001	<0.001	<0.001	**0.001**	**0.002**
Total coliform As MPN/100ml	12	6	14	**Shall not be detectable in any 100 ml sample**	
Fecal Coliform As MPN/100ml	<1.0	<1.8	3.6	**Shall not be detectable in any 100 ml sample**	

Table: 171
Drinking Water Quality Data
Area: Hingula

Project / OCP	Balram OCP	Balram OCP	Balram OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Balaram Colony tap water	Balaram Colony tap water	Balaram Colony tap water		
Dt. of sampling	13.01.2017	15.02.2017	14.03.2017	Acceptable	Permissible
Colour(Hazen)	5	2	6	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	3	1	5
pH	7.84	6.93	7.2	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	12	16	200	600
Total Hardness(mg/L)	508	316	396	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	180	28	22	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	820	512	590	500	2000
Calcium(mg/L)	121.6	68.8	92.8	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)	96	146	134	200	400
Nitrate(mg/L)	5.67	4.76	5.76	45	No relaxation
Fluoride(mg/L)	0.24	0.32	0.24	1	1.5
Selenium(mg/L)	<0.002	<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	0.014	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.16	0.06	0.14	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.1	3.6	4	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 172
Drinking Water Quality Data
Area: Hingula

Project / OCP	Balram OCP	Balaram OCP	Balram OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Danara Village bore well water	Danara village borewell water	Danara Villge Borewell Water		
Dt. of sampling	12.08.16	13.11.16	13.01.2017	Acceptable	Permissible
Colour(Hazen)	3	4	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	1	5
pH	7.02	7.58	7.63	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	44	16	200	600
Total Hardness(mg/L)	68	480	60	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	28	128	14	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	146	769	128	500	2000
Calcium(mg/L)	19.2	145.6	17.6	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)	17	134	32	200	400
Nitrate(mg/L)	3.99	9.18	3.99	45	No relaxation
Fluoride(mg/L)	0.29	0.52	0.41	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	<0.02	0.25	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	3.6	6.8	2	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 173
Drinking Water Quality Data
Area: Hingula

Project / OCP	Balram OCP	Balaram OCP	Balram OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Nakeiposi Village bore well water	Nakeiposi Village borewell water	Nakeiposi Nillge Borewell Water		
Dt. of sampling	12.08.16	13.11.16	13.01.2017	Acceptable	Permissible
Colour(Hazen)	2	4	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	3	3	1	5
pH	6.69	7.77	7.82	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	112	40	12	200	600
Total Hardness(mg/L)	260	304	312	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	80	52	26	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	588	440	568	500	2000
Calcium(mg/L)	81.6	56	70.4	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)	74	12	218	200	400
Nitrate(mg/L)	5.87	5.76	4.78	45	No relaxation
Fluoride(mg/L)	0.24	0.46	0.27	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.04	0.07	0.35	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	3.6	8.2	3.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	3.6	1.8	Shall not be detectable in any 100 ml sample	

Table: 174
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Time office tap water	Time office water	Time office tap water	Time office water		
Dt. of sampling	14.06.2016	14.07.16	12.08.16	15.09.16	Acceptable	Permissible
Colour(Hazen)	3	4	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	2	2	1	5
pH	7.3	7.5	7.25	7.31	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	190	244	264	316	200	600
Total Hardness(mg/L)	312	304	284	252	200	600
Iron(mg/L)	0.006	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	42	50	26	90	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	446	418	428	534	500	2000
Calcium(mg/L)	96	104	70.4	51.2	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)	52	16	14	28	200	400
Nitrate(mg/L)	5.76	6.42	5.76	7.87	45	No relaxation
Fluoride(mg/L)	0.39	0.11	0.27	0.38	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.09	<0.02	0.02	1.75	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	23	3.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	11	<1.8	Shall not be detectable in any 100 ml sample	

Table: 175
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Time office water	Time office water	Time office water		
Dt. of sampling	12.10.16	13.11.16	8.12.16	Acceptable	Permissible
Colour(Hazen)	3	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	3	1	5
pH	7.81	7.45	7.42	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	68	12	24	200	600
Total Hardness(mg/L)	204	120	292	200	600
Iron(mg/L)	0.12	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	22	12	16	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	420	180	370	500	2000
Calcium(mg/L)	56	33.6	80	75	200
Copper(mg/L)	0.08	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	108	24	28	200	400
Nitrate(mg/L)	5.78	4.78	4.43	45	No relaxation
Fluoride(mg/L)	0.22	0.37	0.36	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	0.02	0.073	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.26	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	10	8.2	9.2	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	2	1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 176
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Time office water	Time office water	Time office water		
Dt. of sampling	13.01.2017	15.02.2017	15.03.2017	Acceptable	Permissible
Colour(Hazen)	2	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	3	1	1	5
pH	8.03	8.05	7.28	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	24	28	200	600
Total Hardness(mg/L)	272	168	336	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	28	72	48	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	362	288	452	500	2000
Calcium(mg/L)	70.4	20.8	65.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.02	<0.02	0.18	0.1	0.3
Sulphate(mg/L)	9	8	10	200	400
Nitrate(mg/L)	4.76	5.68	6.23	45	No relaxation
Fluoride(mg/L)	0.43	0.36	0.54	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.15	0.03	0.05	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.20	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	5.5	6	3.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 177
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Gopal Prasad Bore well water	Gopalprasad village bore well water	Gopal Prasad Bore well water	Gopalprasad village bore well water		
Dt. of sampling	14.06.2016	14.07.16	12.08.16	15.09.16	Acceptable	Permissible
Colour(Hazen)	2	2	3	5	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	3	3	4	1	5
pH	6.9	7.21	7.1	6.78	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	196	352	340	296	200	600
Total Hardness(mg/L)	288	360	364	304	200	600
Iron(mg/L)	0.076	<0.06	1.6	<0.06	0.3	No relaxation
Chloride(mg/L)	62	166	160	46	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	441	768	788	482	500	2000
Calcium(mg/L)	60.8	52.8	52.8	41.6	75	200
Copper(mg/L)	<0.03	<0.03	0.05	<0.03	0.05	1.5
Manganese(mg/L)	0.065	0.27	0.03	<0.02	0.1	0.3
Sulphate(mg/L)	48	12	12	20	200	400
Nitrate(mg/L)	7.53	8.42	7.53	5.37	45	No relaxation
Fluoride(mg/L)	0.52	0.64	0.18	0.36	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.03	0.02	0.11	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	3.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 178
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Gopalprasad village bore well water	Gopalprasad village bore well water	Gopalprasad village bore well water		
Dt. of sampling	12.10.16	13.11.16	8.12.16	Acceptable	Permissible
Colour(Hazen)	4	5	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	4	3	1	5
pH	7.85	7.62	7.65	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	60	40	28	200	600
Total Hardness(mg/L)	240	340	160	200	600
Iron(mg/L)	0.29	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	70	76	80	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	522	524	378	500	2000
Calcium(mg/L)	35.2	73.6	17.6	75	200
Copper(mg/L)	0.09	<0.03	0.04	0.05	1.5
Manganese(mg/L)	0.06	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	148	28	74	200	400
Nitrate(mg/L)	7.58	6.47	7.18	45	No relaxation
Fluoride(mg/L)	0.57	0.28	0.43	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	0.05	<0.02	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.18	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	10	9.3	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	2	3.4	1.8	Shall not be detectable in any 100 ml sample	

Table: 179
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Gopalprasad village bore well water	Gopalprasad village bore well water	Gopalprasad village bore well water		
Dt. of sampling	13.01.2017	15.02.2017	15.03.2017	Acceptable	Permissible
Colour(Hazen)	3	2	8	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	5	1	5
pH	7.41	7.75	7.1	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	32	32	32	200	600
Total Hardness(mg/L)	264	164	300	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	20	48	24	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	398	322	396	500	2000
Calcium(mg/L)	51.2	30.4	56	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.04	<0.02	0.06	0.1	0.3
Sulphate(mg/L)	12	14	12	200	400
Nitrate(mg/L)	6.13	6.87	5.87	45	No relaxation
Fluoride(mg/L)	0.52	0.31	0.41	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.72	0.25	0.51	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.20	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	5.6	4	5.6	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 180
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Kumunda Village Bore well water	Kumunda village bore well water	Kumunda Village Bore well water	Kumunda village bore well water		
Dt. of sampling	14.06.2016	14.07.16	12.08.16	15.09.16	Acceptable	Permissible
Colour(Hazen)	2	4	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	4	4	1	5
pH	7.15	7.35	6.86	6.95	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	194	312	220	324	200	600
Total Hardness(mg/L)	288	296	252	368	200	600
Iron(mg/L)	0.294	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	56	48	44	76	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	458	528	452	578	500	2000
Calcium(mg/L)	65.6	64	59.2	62.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.03	<0.02	<0.02	0.12	0.1	0.3
Sulphate(mg/L)	54	16	34	16	200	400
Nitrate(mg/L)	8.42	9.3	5.87	5.87	45	No relaxation
Fluoride(mg/L)	0.41	0.25	0.33	0.37	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.08	<0.02	<0.02	0.07	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.8	6.8	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	***	***	<1.8	11	Shall not be detectable in any 100 ml sample	

Table: 181
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Kumunda village bore well water	Kumunda village bore well water	Kumunda village bore well water		
Dt. of sampling	12.10.16	13.11.16	8.12.16	Acceptable	Permissible
Colour(Hazen)	2	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	3	3	1	5
pH	7.35	7.71	7.72	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	48	36	24	200	600
Total Hardness(mg/L)	236	336	320	200	600
Iron(mg/L)	0.14	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	92	74	72	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	518	520	524	500	2000
Calcium(mg/L)	40	72	68.8	75	200
Copper(mg/L)	0.07	<0.03	0.053	0.05	1.5
Manganese(mg/L)	0.07	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	124	36	78	200	400
Nitrate(mg/L)	6.43	5.87	5.76	45	No relaxation
Fluoride(mg/L)	0.63	0.37	0.7	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	<0.02	0.35	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	0.16	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	12	9.1	12	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	1.8	3.6	Shall not be detectable in any 100 ml sample	

Table: 182
Drinking Water Quality Data
Area: Hingula

Project / OCP	Hingula OCP	Hingula OCP	Hingula OCP	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Kumunda village bore well water	Kumunda village bore well water	Kumunda village bore well water		
Dt. of sampling	13.01.2017	15.02.2017	15.03.2017	Acceptable	Permissible
Colour(Hazen)	4	2	6	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	3	1	5
pH	7.83	7.55	7.01	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	36	48	16	200	600
Total Hardness(mg/L)	316	524	164	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	66	210	66	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	488	1210	294	500	2000
Calcium(mg/L)	68.8	88	24	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	0.04	0.1	0.3
Sulphate(mg/L)	17	218	12	200	400
Nitrate(mg/L)	7.76	12.76	4.87	45	No relaxation
Fluoride(mg/L)	0.6	0.22	0.39	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.15	0.09	0.06	5	15
Hexavelent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.2	<0.20	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	5.5	3.7	5.5	Shall not be detectable in any 100 ml sample	
Fecal Coliform As MPN/100ml	<1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 182
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Canteen tap water, Talcher Colliery	canteen tap-water, Talcher colliery	Canteen tap water, Talcher Colliery		
Dt. of sampling	14.06.2016	14.07.16	13.08.16	Acceptable	Permissible
Colour(Hazen)	3	2	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	4	5	1	5
pH	6.71	7.25	7.01	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	44	56	44	200	600
Total Hardness(mg/L)	52	124	56	200	600
Iron(mg/L)	0.29	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	18	18	14	250	1000
Residual Free chlorine(mg/L)	0.12	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	218	238	106	500	2000
Calcium(mg/L)	14.4	28.8	14.4	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)	69	39	16	200	400
Nitrate(mg/L)	5.8	5.32	3.1	45	No relaxation
Fluoride(mg/L)	0.6	0.39	0.11	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.05	0.02	0.07	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	6.9	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	***	***	1.8	Shall not be detectable in any 100 ml sample	

Table: 183
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher U/G	Talcher U/G	Talcher U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	canteen tap-water, Talcher colliery	canteen tap-water, Talcher colliery	canteen tap-water, Talcher colliery		
Dt. of sampling	15.09.16	14.10.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	3	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	3	1	5
pH	7.21	7.64	7.3	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	52	16	12	200	600
Total Hardness(mg/L)	172	100	120	200	600
Iron(mg/L)	<0.06	0.14	<0.06	0.3	No relaxation
Chloride(mg/L)	20	16	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	280	160	176	500	2000
Calcium(mg/L)	40	32	30.4	75	200
Copper(mg/L)	<0.03	0.08	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.06	<0.02	0.1	0.3
Sulphate(mg/L)	64	24	20	200	400
Nitrate(mg/L)	3.99	4.87	4.23	45	No relaxation
Fluoride(mg/L)	0.57	0.63	0.3	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	0.0036	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.26	0.03	<0.02	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	10	15	8.3	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	7.8	6.1	1.8	Shall not be detectable in any 100 ml sample	

Table: 184
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher U/G	Talcher U/G	Talcher U/G	Talcher U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	canteen tap-water, Talcher colliery	canteen tap-water, Talcher colliery	canteen tap-water, Talcher colliery	canteen tap-water, Talcher colliery		
Dt. of sampling	9.12.16	14.01.2017	15.02.2017	15.03.2017	Acceptable	Permissible
Colour(Hazen)	2	1	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	2	2	1	5
pH	7.96	8.06	7.04	7.27	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	24	16	16	28	200	600
Total Hardness(mg/L)	136	104	140	144	200	600
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	22	16	24	32	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	230	164	242	270	500	2000
Calcium(mg/L)	33.6	27.2	33.6	36.8	75	200
Copper(mg/L)	0.059	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	<0.02	<0.02	0.05	0.1	0.3
Sulphate(mg/L)	32	26	39	48	200	400
Nitrate(mg/L)	4.76	3.99	5.37	6.76	45	No relaxation
Fluoride(mg/L)	0.34	0.37	0.61	0.43	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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.11	0.06	0.08	0.09	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.16	<0.2	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	14	6.1	3.7	6	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	1.8	<1.8	1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 185
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Talcher Colliery canteen Tap Water, GM Office	Talcher colliery canteen tap-water, GM office	Talcher Colliery canteen Tap Water, GM Office		
Dt. of sampling	14.06.2016	15.07.16	13.08.16	Acceptable	Permissible
Colour(Hazen)	2	5	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	2	2	1	5
pH	7.38	7.17	6.89	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	64	64	36	200	600
Total Hardness(mg/L)	128	88	100	200	600
Iron(mg/L)	0.252	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	24	34	24	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	260	226	204	500	2000
Calcium(mg/L)	30.4	24	25.6	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.098	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	48	30	48	200	400
Nitrate(mg/L)	4.43	3.99	3.99	45	No relaxation
Fluoride(mg/L)	0.51	0.41	0.15	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.07	<0.02	0.08	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	3.6	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	***	***	<1.8	Shall not be detectable in any 100 ml sample	

Table: 186
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher U/G	Talcher U/G	Talcher U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Talcher colliery canteen tap-water, GM office	Talcher colliery canteen tap-water, GM office	Talcher colliery canteen tap-water, GM office		
Dt. of sampling	15.09.16	14.10.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	4	2	1	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	6	3	2	1	5
pH	7.11	7.49	7.49	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	28	16	12	200	600
Total Hardness(mg/L)	92	60	56	200	600
Iron(mg/L)	<0.06	0.21	0.08	0.3	No relaxation
Chloride(mg/L)	14	12	12	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	164	98	94	500	2000
Calcium(mg/L)	25.6	17.6	12.8	75	200
Copper(mg/L)	<0.03	0.07	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.6	<0.02	0.1	0.3
Sulphate(mg/L)	40	10	12	200	400
Nitrate(mg/L)	3.1	2.1	1.48	45	No relaxation
Fluoride(mg/L)	0.65	0.57	0.34	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.05	0.11	0.05	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	3.6	10	10	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	<1.8	4	<1.8	Shall not be detectable in any 100 ml sample	

Table: 187
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher U/G	Talcher U/G	Talcher U/G	Talcher U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Talcher colliery canteen tap-water, GM office	Talcher colliery canteen tap-water, GM office	Talcher colliery canteen tap-water, GM office	Talcher colliery canteen tap-water, GM office		
Dt. of sampling	9.12.16	14.01.2017	15.02.2017	15.03.2017	Acceptable	Permissible
Colour(Hazen)	1	1	4	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	1	2	1	1	5
pH	7.74	7.86	7.17	7.48	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	12	12	28	200	600
Total Hardness(mg/L)	76	52	80	92	200	600
Iron(mg/L)	0.48	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	12	12	16	30	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	120	84	132	188	500	2000
Calcium(mg/L)	17.6	14.4	17.6	19.2	75	200
Copper(mg/L)	0.053	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.08	<0.02	<0.02	0.03	0.1	0.3
Sulphate(mg/L)	14	8	16	22	200	400
Nitrate(mg/L)	1.76	1.08	3.99	4.76	45	No relaxation
Fluoride(mg/L)	0.42	0.32	0.59	0.52	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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.07	0.04	0.05	0.13	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.09	<0.2	<0.2	<0.20	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	15	5.5	2	6.1	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	1.8	1.8	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 188
Drinking Water Quality Data
Area: Talcher

Project / OCP	Talcher Colliery UG	Talcher Colliery UG	Nandira Colliery UG	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Canteen tap water, Nandira Colliery	canteen tap-water, Nandira colliery	Canteen tap water, Nandira Colliery		
Dt. of sampling	14.06.2016	15.07.16	13.08.16	Acceptable	Permissible
Colour(Hazen)	1	2	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	4	1	5
pH	7.42	7.05	6.97	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76	84	88	200	600
Total Hardness(mg/L)	160	140	144	200	600
Iron(mg/L)	0.27	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	28	22	26	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	327	260	274	500	2000
Calcium(mg/L)	32	32	36.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.072	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	64	42	51	200	400
Nitrate(mg/L)	5.32	5.76	4.87	45	No relaxation
Fluoride(mg/L)	0.21	0.44	0.29	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	0.0036	0.003	No relaxation
Zinc(mg/L)	0.06	0.14	0.26	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	17	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	***	***	7.8	Shall not be detectable in any 100 ml sample	

Table: 189
Drinking Water Quality Data
Area: Talcher

Project / OCP	Nandira U/G	Nandira U/G	Nandira U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	canteen tap-water, Nandira colliery	canteen tap-water, Nandira colliery	canteen tap-water, Nandira colliery		
Dt. of sampling	15.09.16	14.10.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	5	3	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	3	3	1	5
pH	7.25	7.75	7.75	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	72	20	12	200	600
Total Hardness(mg/L)	144	152	148	200	600
Iron(mg/L)	<0.06	0.09	<0.06	0.3	No relaxation
Chloride(mg/L)	44	22	16	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	258	226	224	500	2000
Calcium(mg/L)	36.8	41.6	40	75	200
Copper(mg/L)	<0.03	0.08	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.1	<0.02	0.1	0.3
Sulphate(mg/L)	46	26	46	200	400
Nitrate(mg/L)	4.43	4.43	4.43	45	No relaxation
Fluoride(mg/L)	0.19	0.63	0.38	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.03	0.15	0.16	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	10	10	9.1	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	1.8	4	<1.8	Shall not be detectable in any 100 ml sample	

Table: 190
Drinking Water Quality Data
Area: Talcher

Project / OCP	Nandira U/G	Nandira U/G	Nandira U/G	Nandira U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	canteen tap-water, Nandira colliery	canteen tap-water, Nandira colliery	canteen tap-water, Nandira colliery	canteen tap-water, Nandira colliery		
Dt. of sampling	9.12.16	13.01.2017	15.02.2017	15.03.2017	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	2	1	5
pH	7.64	8.06	7.39	7.4	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	20	16	8	16	200	600
Total Hardness(mg/L)	152	140	152	160	200	600
Iron(mg/L)	0.69	<0.06	0.1	<0.06	0.3	No relaxation
Chloride(mg/L)	16	16	22	10	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	220	248	274	294	500	2000
Calcium(mg/L)	35.2	35.2	40	43.2	75	200
Copper(mg/L)	0.052	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.03	<0.02	<0.02	0.07	0.1	0.3
Sulphate(mg/L)	28	74	84	84	200	400
Nitrate(mg/L)	4.76	4.48	4.23	5.47	45	No relaxation
Fluoride(mg/L)	0.62	0.25	0.42	0.36	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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.21	0.07	0.08	0.18	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.09	<0.2	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	8.1	4	1.8	4.1	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	<1.8	1.8	<1.8	<1.8	Shall not be detectable in any 100 ml sample	

Table: 191
Drinking Water Quality Data
Area: Talcher

Project / OCP	Nandira Colliery UG	Nandira Colliery UG	Nandira Colliery UG	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Pit top tap water,NandiraColliery	Pit top tap water. Nandira colliery	Pit top tap water, Nandira Colliery		
Dt. of sampling	14.06.2016	15.07.16	13.08.16	Acceptable	Permissible
Colour(Hazen)	2	3	4	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	1	3	2	1	5
pH	7.48	7.11	6.87	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	76	76	84	200	600
Total Hardness(mg/L)	148	136	152	200	600
Iron(mg/L)	0.137	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	24	16	14	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	338	258	268	500	2000
Calcium(mg/L)	33.6	32	36.8	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.06	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	68	42	47	200	400
Nitrate(mg/L)	5.76	5.32	4.43	45	No relaxation
Fluoride(mg/L)	0.18	0.3	0.2	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.04	0.17	0.05	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	17	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	***	***	7.8	Shall not be detectable in any 100 ml sample	

Table: 192
Drinking Water Quality Data
Area: Talcher

Project / OCP	Nandira U/G	Nandira U/G	Nandira U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Pit top tap water. Nandira colliery	Pit top tap water. Nandira colliery	Pit top tap water. Nandira colliery		
Dt. of sampling	15.09.16	14.10.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	3	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	4	1	3	1	5
pH	7.31	7.89	7.66	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	72	16	12	200	600
Total Hardness(mg/L)	132	156	144	200	600
Iron(mg/L)	<0.06	0.1	<0.06	0.3	No relaxation
Chloride(mg/L)	10	18	18	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	220	224	220	500	2000
Calcium(mg/L)	35.2	44.8	36.8	75	200
Copper(mg/L)	<0.03	0.08	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.1	<0.02	0.1	0.3
Sulphate(mg/L)	44	22	44	200	400
Nitrate(mg/L)	3.99	3.99	4.76	45	No relaxation
Fluoride(mg/L)	0.43	0.59	0.44	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	<0.02	0.18	0.03	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.8	17	10	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	<1.8	6.8	6.1	Shall not be detectable in any 100 ml sample	

Table: 193
Drinking Water Quality Data
Area: Talcher

Project / OCP	Nandira U/G	Nandira U/G	Nandira U/G	Nandira U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Pit top tap water. Nandira colliery	Pit top tap water. Nandira colliery	Pit top tap water. Nandira colliery	Pit top tap water. Nandira colliery		
Dt. of sampling	9.12.16	13.01.2017	15.02.2017	15.03.2017	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)	1	1	3	1	1	5
pH	7.89	8.05	7.71	7.3	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	12	20	16	16	200	600
Total Hardness(mg/L)	144	136	160	356	200	600
Iron(mg/L)	0.21	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	20	20	18	30	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	216	238	260	552	500	2000
Calcium(mg/L)	33.6	36.8	38.4	78.4	75	200
Copper(mg/L)	0.048	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	<0.02	<0.02	0.04	0.1	0.3
Sulphate(mg/L)	24	68	58	126	200	400
Nitrate(mg/L)	4.43	4.76	4.76	6.43	45	No relaxation
Fluoride(mg/L)	0.54	0.41	0.32	0.49	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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.15	0.07	0.07	0.05	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.11	<0.2	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.1	3.6	4	6.1	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	<1.8	<1.8	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 194
Drinking Water Quality Data
Area: Talcher

Project / OCP	Deulbera UG	Deulbera UG	Deulbera UG	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Dulbera Manager office tap water	Deulbera manager office tap water, Deulbera U/G	Dulbera Manager office tap water		
Dt. of sampling	14.06.2016	15.07.16	13.08.16	Acceptable	Permissible
Colour(Hazen)	2	2	3	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	3	1	3	1	5
pH	7.55	7.32	7.16	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	64	40	20	200	600
Total Hardness(mg/L)	60	56	52	200	600
Iron(mg/L)	0.296	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	20	12	14	250	1000
Residual Free chlorine(mg/L)	<0.04	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	154	126	102	500	2000
Calcium(mg/L)	11.2	16	14.4	75	200
Copper(mg/L)	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.044	<0.02	<0.02	0.1	0.3
Sulphate(mg/L)	30	16	18	200	400
Nitrate(mg/L)	4.43	3.99	3.1	45	No relaxation
Fluoride(mg/L)	0.16	0.43	0.51	1	1.5
Selenium(mg/L)	<0.002	<0.002	<0.002	0.01	No relaxation
Arsenic(mg/L)	<0.005	<0.02	<0.002	0.01	0.05
Lead(mg/L)	<0.005	<0.005	<0.005	0.01	No relaxation
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.08	0.08	0.03	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	<0.2	<0.20	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	***	***	23	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	***	***	11	Shall not be detectable in any 100 ml sample	

Table: 195
Drinking Water Quality Data
Area: Talcher

Project / OCP	Deulbera U/G	Deulbera U/G	Deulbera U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Deulbera manager office tap water	Deulbera manager office tap water	Deulbera manager office tap water		
Dt. of sampling	15.09.16	14.10.16	15.11.16	Acceptable	Permissible
Colour(Hazen)	4	1	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	2	1	1	5
pH	7.45	7.77	7.34	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	32	20	12	200	600
Total Hardness(mg/L)	48	56	72	200	600
Iron(mg/L)	<0.06	0.15	<0.06	0.3	No relaxation
Chloride(mg/L)	16	14	16	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	94	94	124	500	2000
Calcium(mg/L)	14.4	44.8	17.6	75	200
Copper(mg/L)	<0.03	0.08	<0.03	0.05	1.5
Manganese(mg/L)	<0.02	0.1	<0.02	0.1	0.3
Sulphate(mg/L)	12	18	26	200	400
Nitrate(mg/L)	2.14	2.2	1.18	45	No relaxation
Fluoride(mg/L)	0.49	0.39	0.54	1	1.5
Selenium(mg/L)	<0.002	<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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.02	0.25	0.23	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	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
Phenolics(mg/L)	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.8	15	10	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	<1.8	2	6	Shall not be detectable in any 100 ml sample	

Table: 196
Drinking Water Quality Data
Area: Talcher

Project / OCP	Deulbera U/G	Deulbera U/G	Deulbera U/G	Deulbera U/G	Indian Drinking Standards (IS-10500):2012	
Monitoring Station	Deulbera manager office tap water	Deulbera manager office tap water	Deulbera manager office tap water	Deulbera manager office tap water		
Dt. of sampling	9.12.16	14.01.2017	15.02.2017	15.03.2017	Acceptable	Permissible
Colour(Hazen)	2	1	6	2	5	15
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity(NTU)	2	1	4	1	1	5
pH	6.99	7.95	7.66	6.92	6.5-8.5	No relaxation
Total Alkalinity(mg/L)	16	20	12	12	200	600
Total Hardness(mg/L)	92	88	120	112	200	600
Iron(mg/L)	0.06	<0.06	<0.06	<0.06	0.3	No relaxation
Chloride(mg/L)	14	10	14	20	250	1000
Residual Free chlorine(mg/L)	<1.0	<1.0	<1.0	<1.0	0.2	1
Total Dissolve Solid(mg/L)	160	162	190	208	500	2000
Calcium(mg/L)	22.4	25.6	25.6	27.2	75	200
Copper(mg/L)	0.05	<0.03	<0.03	<0.03	0.05	1.5
Manganese(mg/L)	0.09	<0.02	<0.02	0.04	0.1	0.3
Sulphate(mg/L)	28	52	42	49	200	400
Nitrate(mg/L)	3.99	2.78	2.74	3.99	45	No relaxation
Fluoride(mg/L)	0.34	0.42	0.69	0.53	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
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.003	No relaxation
Zinc(mg/L)	0.38	0.1	0.17	0.16	5	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05 (Indian Drinking Standards (IS-10500):1991)	No relaxation (Indian Drinking Standards (IS-10500):1991)
Boron(mg/L)	0.25	<0.2	<0.2	<0.2	0.5	1
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	0.001	0.002
Total coliform As MPN/100ml	6.1	3.7	1.8	6	Shall not be detectable in any 100 ml sample	
Faecal Coliform As /100ml	1.8	<1.8	<1.8	1.8	Shall not be detectable in any 100 ml sample	

Table: 197
Surface Water Quality Data
Area: **Jagannath**

Project/OCP	**Bhubaneswari OCP**	**Bhubaneswari OCP**	**Bhubaneswari OCP**	**Bhubaneswari**	
NAME OF STATIONS	**Bangarujhor stream near Sareila village as d/s water of Bhubaneswari OCP before joining Brahmani river**	**Bangarujhor stream near Sareila/Khaisa pala village as d/s water of Bhubaneswari OCP before joining Brahmani river**	**Bangarujhor stream near Khaisa pala village as d/s water of Bhubaneswari OCP before joining Brahmani river**	**Bangarujhor stream near Sareila pala village as d/s water of Bhubaneswari OCP before joining Brahmani river**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**27.06.16**	**15.09.16**	**30.12.16**	**29.03.17**	
pH	7.46	**7.35**	7.75	7.29	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.2	**4.9**	4.8	4.5	**4**
BOD (3 days 27ºc(mg/L)	2.8	**2.8**	3.4	2.3	**3**
Color ,Hazen unit	12	**7**	4	4	**300**
Total disolved solids (mg/L)	768	**494**	558	756	**1500**
TSS(mg/L)	48	**48**	12	36	**-**
Total Hardness(mg/L)	540	**324**	396	464	**-**
Copper(mg/L)	0.05	**<0.03**	<0.03	<0.03	**1.5**
Iron(mg/L)	0.3	**0.3**	<0.06	<0.06	**50**
Chlorides(mg/L)	44	**28**	30	54	**600**
Sulphate(mg/L)	67	**98**	86	168	**400**
Nitrate(mg/L)	16.12	**8.78**	7.16	7.67	**50**
Fluoride(mg/L)	0.76	**0.63**	0.57	0.69	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	<0.001	<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**	<0.002	<0.002	**0.2**
Cyanide(mg/L)	***	**0.027**	0.024	0.024	
Lead(mg/L)	<0.005	**<0.005**	<0.005	<0.005	**0.1**
Zinc(mg/L)	0.02	**<0.02**	0.31	<0.02	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	<0.01	<0.01	**0.05**
Oil & Grease	<4.0	**<4.0**	<4.0	<4.0	**0.1**

Table: 198
Surface Water Quality Data
Area: **Jagannath**

Project/OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
NAME OF STATIONS	Pond water of Madanmohanpur	Pond water of Madanmohanpur	Pond water of Madanmohanpur	Pond water of Madanmohanpur	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**27.06.16**	**15.09.16**	**30.12.16**	**29.03.17**	
pH	7.27	**7.51**	**7.54**	**7.68**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.8	**4.4**	**4.7**	**4.8**	**4**
BOD (3 days 27ºc(mg/L)	3.8	**2.7**	**3.3**	**2.7**	**3**
Color ,Hazen unit	32	**8**	**3**	**10**	**300**
Total disolved solids (mg/L)	494	**148**	**544**	**418**	**1500**
TSS(mg/L)	86	**28**	**38**	**22**	**-**
Total Hardness(mg/L)	92	**80**	**388**	**76**	**-**
Copper(mg/L)	0.07	**0.08**	**<0.03**	**<0.04**	**1.5**
Iron(mg/L)	0.1	**<0.06**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	216	**14**	**32**	**226**	**600**
Sulphate(mg/L)	27	**36**	**74**	**18**	**400**
Nitrate(mg/L)	23.12	**3.99**	**5.76**	**6.23**	**50**
Fluoride(mg/L)	0.69	**0.53**	**0.28**	**0.63**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.026**	**0.022**	**0.026**	
Lead(mg/L)	<0.005	**<0.005**	**<0.005**	**<0.005**	**0.1**
Zinc(mg/L)	0.03	**<0.02**	**0.04**	**<0.02**	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 199
Surface Water Quality Data
Area: **Jagannath**

Project/OCP	**Bhubaneswari OCP**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Bangarujhor river near Raghunathpur as u/s water of Bhubaneswari OCP**	
Date of sampling	**27.06.16**	
pH	7.14	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.6	**4**
BOD (3 days 27°c(mg/L)	2.6	**3**
Color ,Hazen unit	4	**300**
Total disolved solids (mg/L)	328	**1500**
TSS(mg/L)	22	**-**
Total Hardness(mg/L)	60	**-**
Copper(mg/L)	<0.03	**1.5**
Iron(mg/L)	<0.06	**50**
Chlorides(mg/L)	36	**600**
Sulphate(mg/L)	140	**400**
Nitrate(mg/L)	5.61	**50**
Fluoride(mg/L)	0.8	**1.5**
Phenolic Compound(mg/L)	<0.001	**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	<4.0	**0.1**

Table: 200
Surface Water Quality Data
Area: **Bharatpur**

Project/OCP	**Ananta OCP**	**Ananta OCP**	**Ananta OCP**	
NAME OF STATIONS	**Bangarujhor river near Raghunathpur village as d/s water of Ananta OCP**	**Bangarujhor river near Raghunathpur/Jilinda village as d/s water of Ananta OCP**	**Bangarujhor river near Jilinda village as d/s water of Ananta OCP**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**27.06.16**	**15.09.16**	**30.12.16**	
pH	6.72	**7.76**	8.09	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.4	**4.9**	5.1	**4**
BOD (3 days 27ºc(mg/L)	3.2	**3.7**	4	**3**
Color ,Hazen unit	8	**4**	3	**300**
Total disolved solids (mg/L)	820	**502**	250	**1500**
TSS(mg/L)	42	**18**	28	**-**
Total Hardness(mg/L)	588	**324**	152	**-**
Copper(mg/L)	<0.03	**0.38**	<0.03	**1.5**
Iron(mg/L)	<0.06	**<0.06**	<0.06	**50**
Chlorides(mg/L)	48	**26**	26	**600**
Sulphate(mg/L)	86	**128**	34	**400**
Nitrate(mg/L)	4.82	**4.32**	5.76	**50**
Fluoride(mg/L)	0.98	**0.73**	0.42	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	<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)	<0.002	**<0.002**	<0.002	**0.2**
Cyanide(mg/L)	***	**0.033**	0.027	
Lead(mg/L)	<0.005	**<0.005**	<0.005	**0.1**
Zinc(mg/L)	0.02	**0.38**	0.1	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	<0.01	**0.05**
Oil & Grease	<4.0	**<4.0**	<4.0	**0.1**

Table: 201
Surface Water Quality Data
Area: **Bharatpur**

Project/OCP	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
NAME OF STATIONS	Bangaru jhor river near Joragarhia as u/s water of point of confluence of Ananta OCP	Bangaru jhor river near Joragarhia/Banapalli as u/s water of point of confluence of Ananta OCP	Bangaru jhor river near Banapalli as u/s water of point of confluence of Ananta OCP	Bangaru jhor river near Joragarhia as u/s water of point of confluence of Ananta OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**27.06.16**	**15.09.16**	**30.12.16**	**29.03.17**	
pH	7.14	**7.55**	7.95	7.52	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.6	**4.8**	4.9	4.3	**4**
BOD (3 days 27°c(mg/L)	2.6	**3.8**	3.8	2.9	**3**
Color ,Hazen unit	4	**10**	2	8	**300**
Total disolved solids (mg/L)	328	**526**	260	818	**1500**
TSS(mg/L)	22	**32**	42	28	**-**
Total Hardness(mg/L)	60	**340**	156	516	**-**
Copper(mg/L)	<0.03	**0.27**	<0.03	0.03	**1.5**
Iron(mg/L)	<0.06	**<0.06**	<0.06	<0.06	**50**
Chlorides(mg/L)	36	**30**	26	46	**600**
Sulphate(mg/L)	140	**134**	38	194	**400**
Nitrate(mg/L)	5.61	**4.82**	5.47	9.17	**50**
Fluoride(mg/L)	0.8	**0.6**	0.27	0.97	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	<0.001	<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**	<0.002	<0.002	**0.2**
Cyanide(mg/L)	***	**0.033**	0.03	0.03	
Lead(mg/L)	<0.005	**<0.005**	<0.005	<0.005	**0.1**
Zinc(mg/L)	0.02	**0.21**	0.03	<0.02	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	<0.01	<0.01	**0.05**
Oil & Grease	<4.0	**<4.0**	<4.0	<4.0	**0.1**

Table: 202
Surface Water Quality Data
Area: **Bharatpur**

Project/OCP	Bharathpur OCP	Bharathpur OCP	Bharatpur OCP	Bharatpur	
NAME OF STATIONS	Bangarujhor river near Telepasi village as u/s water of Bharathpur OCP	Bangarujhor river near Telepasi/Solada village as u/s water of Bharathpur OCP	Bangarujhor river near Solada village as u/s water of Bharathpur OCP	Bangarujhor river near Telepasi village as u/s water of Bharathpur OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**27.06.16**	**15.09.16**	**30.12.16**	**29.03.17**	
pH	7.2	**7.37**	**7.37**	**7.72**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.3	**4.7**	**4.4**	**4.2**	**4**
BOD (3 days 27°c(mg/L)	3.2	**3.3**	**3.2**	**2.1**	**3**
Color ,Hazen unit	5	**10**	**4**	**2**	**300**
Total disolved solids (mg/L)	594	**534**	**224**	**800**	**1500**
TSS(mg/L)	24	**36**	**32**	**16**	**-**
Total Hardness(mg/L)	380	**344**	**108**	**492**	**-**
Copper(mg/L)	<0.03	**0.17**	**<0.03**	**<0.03**	**1.5**
Iron(mg/L)	<0.06	**<0.06**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	32	**28**	**32**	**44**	**600**
Sulphate(mg/L)	8.4	**138**	**28**	**206**	**400**
Nitrate(mg/L)	8.78	**7.58**	**6.13**	**7.87**	**50**
Fluoride(mg/L)	0.8	**0.69**	**0.22**	**0.57**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.028**	**0.022**	**0.028**	
Lead(mg/L)	<0.005	**<0.005**	**<0.005**	**<0.005**	**0.1**
Zinc(mg/L)	0.02	**<0.02**	**0.35**	**<0.02**	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 203
Surface Water Quality Data
Area: **Bharatpur**

Project/OCP	**Bharathpur OCP**	
NAME OF STATIONS	**Bangaru jhor river near Joragarhia as d/s water of point of confluence of Bharatpur OCP**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**27.06.16**	
pH	7.14	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.6	**4**
BOD (3 days 27°c(mg/L)	2.6	**3**
Color ,Hazen unit	4	**300**
Total disolved solids (mg/L)	328	**1500**
TSS(mg/L)	22	**-**
Total Hardness(mg/L)	60	**-**
Copper(mg/L)	<0.03	**1.5**
Iron(mg/L)	<0.06	**50**
Chlorides(mg/L)	36	**600**
Sulphate(mg/L)	140	**400**
Nitrate(mg/L)	5.61	**50**
Fluoride(mg/L)	0.8	**1.5**
Phenolic Compound(mg/L)	<0.001	**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	<4.0	**0.1**

Table: 204
Surface Water Quality Data
Area: **Lingaraj**

Project/OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	
NAME OF STATIONS	Village pond near Deulbera siding	Village pond near Deulbera siding	Village pond near Deulbera siding	Village pond near Deulbera siding	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	27.06.16	15.09.16	30.12.16	29.03.17	
pH	6.88	7.05	7.84	7.2	6.5-8.5
Dissolved Oxygen(mg/L)	4.5	4.6	4.9	4.9	4
BOD (3 days 27°c(mg/L)	2.2	2.2	3.1	3.1	3
Color ,Hazen unit	6	6	2	2	300
Total disolved solids (mg/L)	268	324	98	720	1500
TSS(mg/L)	32	28	16	22	-
Total Hardness(mg/L)	120	196	60	428	-
Copper(mg/L)	<0.03	0.19	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	50
Chlorides(mg/L)	36	14	12	50	600
Sulphate(mg/L)	26	94	10	178	400
Nitrate(mg/L)	4.32	5.76	0.2	7.47	50
Fluoride(mg/L)	0.77	0.34	0.45	0.83	1.5
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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	<0.002	<0.002	0.2
Cyanide(mg/L)	***	0.031	0.03	0.031	
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	0.12	<0.02	0.04	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	<4.0	0.1

Table: 205
Surface Water Quality Data
Area: **Kaniha**

Project/OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
NAME OF STATIONS	**Singada jhor stream nearer to village Khairnali as u/s water for Kaniha OCP**	**Singada jhor stream nearer to village Khairnali/ Bhagirathipur as u/s water for Kaniha OCP**	**Singada jhor stream nearer to village Bhagirathipur as u/s water for Kaniha OCP**	**Singada jhor stream nearer to village Bhagirathipur as u/s water for Kaniha OCP**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**29.06.16**	**12.09.16**	**30.12.16**	**25.03.17**	
pH	7.72	7.43	7.87	**7.25**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.4	4.1	4.4	**5.2**	**4**
BOD (3 days 27ºc(mg/L)	2.6	3.2	2.8	**3.4**	**3**
Color ,Hazen unit	7	18	5	**6**	**300**
Total disolved solids (mg/L)	342	148	652	**182**	**1500**
TSS(mg/L)	26	48	12	**18**	**-**
Total Hardness(mg/L)	192	80	456	**112**	**-**
Copper(mg/L)	<0.03	0.28	<0.03	**<0.03**	**1.5**
Iron(mg/L)	<0.06	<0.06	<0.06	**<0.06**	**50**
Chlorides(mg/L)	18	22	40	**16**	**600**
Sulphate(mg/L)	47	24	86	**22**	**400**
Nitrate(mg/L)	6.51	3.99	7.51	**4.43**	**50**
Fluoride(mg/L)	0.8	1.03	0.43	**1.03**	**1.5**
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	**<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	**<0.02**	**0.05**
Arsenic(mg/L)	<0.002	<0.002	<0.002	**<0.002**	**0.2**
Cyanide(mg/L)	***	0.03	0.028	**0.033**	
Lead(mg/L)	<0.005	<0.005	<0.005	**<0.005**	**0.1**
Zinc(mg/L)	<0.02	<0.02	0.03	**0.04**	**15**
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	**<0.01**	**0.05**
Oil & Grease	<4.0	<4.0	<4.0	**<4.0**	**0.1**

Table: 206
Surface Water Quality Data
Area: **Kaniha**

Project/OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
NAME OF STATIONS	**Before Junction point of Singadajhor & Brahmani river at Balangi village as d/s for Kaniha OCP**	**Before Junction point of Singadajhor & Brahmani river at Balangi village as d/s for Kaniha OCP**	**Before Junction point of Singadajhor & Brahmani river at Balangi village as d/s for Kaniha OCP**	**Before Junction point of Singadajhor & Brahmani river at Balangi village as d/s for Kaniha OCP**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**29.06.16**	**12.09.16**	**30.12.16**	**25.03.17**	
pH	6.54	7.54	7.54	7.21	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.8	4.8	4.8	4.7	**4**
BOD (3 days 27°c(mg/L)	3.2	3.8	2.9	2.5	**3**
Color ,Hazen unit	8	28	3	4	**300**
Total disolved solids (mg/L)	354	144	370	178	**1500**
TSS(mg/L)	44	68	18	16	**-**
Total Hardness(mg/L)	200	88	120	112	**-**
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	**50**
Chlorides(mg/L)	26	16	80	22	**600**
Sulphate(mg/L)	47	22	98	19	**400**
Nitrate(mg/L)	4.82	3.1	5.76	3.99	**50**
Fluoride(mg/L)	0.78	0.43	0.31	0.91	**1.5**
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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	<0.002	<0.002	**0.2**
Cyanide(mg/L)	***	0.037	0.032	0.03	
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	<0.01	<0.01	**0.05**
Oil & Grease	<4.0	<4.0	<4.0	<4.0	**0.1**

Table: 207
Surface Water Quality Data
Area: **Kaniha**

Project/OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
NAME OF STATIONS	Tikra nadi near Kaniah village as u/s water for Kaniah OCP	Tikra nadi near Kaniah village as u/s water for Kaniah OCP	Tikra nadi near Kaniah village as u/s water for Kaniah OCP	Tikra nadi near Kaniah village as u/s water for Kaniah OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**29.06.16**	**12.09.16**	**30.12.16**	**25.03.17**	
pH	6.59	7.71	7.94	7.09	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.6	5.7	5.2	4.1	**4**
BOD (3 days 27°c(mg/L)	2.4	4.1	3.9	2.7	**3**
Color ,Hazen unit	5	52	4	4	**300**
Total disolved solids (mg/L)	448	228	644	346	**1500**
TSS(mg/L)	36	98	22	22	**-**
Total Hardness(mg/L)	228	140	546	192	**-**
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	16	38	36	**600**
Sulphate(mg/L)	48	44	78	92	**400**
Nitrate(mg/L)	15.16	7.58	8.76	4.76	**50**
Fluoride(mg/L)	0.79	0.69	0.39	0.77	**1.5**
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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)	0.018	<0.002	<0.002	<0.002	**0.2**
Cyanide(mg/L)	***	0.035	0.03	0.029	
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.1**
Zinc(mg/L)	<0.02	0.02	0.04	<0.02	**15**
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	**0.05**
Oil & Grease	<4.0	<4.0	<4.0	<4.0	**0.1**

Table: 208
Surface Water Quality Data
Area: **Kaniha**

Project/OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
NAME OF STATIONS	Tikra nadi near Shagarhi Pala village as d/s water for Kaniah OCP	Tikra nadi near Shagarhi Pala village as d/s water for Kaniah OCP	Tikra nadi near Shagarhi Pala village as d/s water for Kaniah OCP	Tikra nadi near Shagarhi Pala village as d/s water for Kaniah OCP	
Date of sampling	29.06.16	12.09.16	30.12.16	25.03.17	
pH	7.48	7.76	7.14	6.74	6.5-8.5
Dissolved Oxygen(mg/L)	4.6	5.2	5.3	4.6	4
BOD (3 days 27°c(mg/L)	2.6	3.8	4.1	2.2	3
Color ,Hazen unit	8	58	2	2	300
Total disolved solids (mg/L)	464	208	68	340	1500
TSS(mg/L)	46	108	42	18	-
Total Hardness(mg/L)	232	124	32	184	-
Copper(mg/L)	0.04	0.07	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	50
Chlorides(mg/L)	32	18	12	42	600
Sulphate(mg/L)	45	40	8	88	400
Nitrate(mg/L)	16.12	6.51	3.99	4.43	50
Fluoride(mg/L)	0.81	1.17	0.53	0.56	1.5
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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)	0.018	<0.002	<0.002	<0.002	0.2
Cyanide(mg/L)	***	0.036	0.034	0.032	
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.02	0.09	0.04	0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	<4.0	0.1

Table: 209
Surface Water Quality Data
Area: **Hingula**

Project/OCP	**Balaram OCP**	**Balaram OCP**	**Balaram OCP**		
NAME OF STATIONS	**Derjenga reservoir as a part of impact study**	**Derjenga reservoir as a part of impact study**	**Derjenga reservoir as a part of impact study**	**Derjenga reservoir as a part of impact study**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**30.06.16**	**15.09.16**	**31.12.16**	**21.03.17**	
pH	6.88	**7.07**	**7.79**	**7.25**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.6	**4.1**	**4.9**	**5.5**	**4**
BOD (3 days 27°c(mg/L)	1.2	**2.7**	**3.1**	**3.3**	**3**
Color ,Hazen unit	3	**2**	**3**	**8**	**300**
Total disolved solids (mg/L)	284	**372**	**316**	**206**	**1500**
TSS(mg/L)	16	**16**	**16**	**38**	**-**
Total Hardness(mg/L)	148	**204**	**100**	**104**	**-**
Copper(mg/L)	1.05	**<0.03**	**<0.03**	**0.03**	**1.5**
Iron(mg/L)	<0.06	**<0.06**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	18	**22**	**38**	**34**	**600**
Sulphate(mg/L)	28	**58**	**28**	**35**	**400**
Nitrate(mg/L)	7.96	**8.78**	**5.87**	**4.43**	**50**
Fluoride(mg/L)	0.61	**1.11**	**0.52**	**0.54**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.038**	**0.036**	**0.026**	
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**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 210
Surface Water Quality Data
Area: **Hingula**

Project/OCP	**Balaram OCP**	**Balaram OCP**	**Balaram OCP**	**Balaram OCP**	
NAME OF STATIONS	**Pond water of Ambapal village**	**Pond water of Ambapal village**	**Pond water of Ambapal village**	**Pond water of Ambapal village**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
Date of sampling	**27.06.16**	**15.09.16**	**31.12.16**	**30.03.17**	
pH	7.22	**7.55**	**7.49**	**7.58**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.8	**4.8**	**5.5**	**5.2**	**4**
BOD (3 days 27ºc(mg/L)	1.4	**3.2**	**3.4**	**2.8**	**3**
Color ,Hazen unit	3	**7**	**3**	**4**	**300**
Total disolved solids (mg/L)	274	**168**	**354**	**138**	**1500**
TSS(mg/L)	18	**30**	**22**	**24**	**-**
Total Hardness(mg/L)	148	**72**	**200**	**40**	**-**
Copper(mg/L)	0.05	**<0.03**	**<0.03**	**<0.03**	**1.5**
Iron(mg/L)	<0.06	**<0.06**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	18	**42**	**38**	**22**	**600**
Sulphate(mg/L)	24	**20**	**48**	**8**	**400**
Nitrate(mg/L)	7.58	**5.61**	**6.51**	**4.76**	**50**
Fluoride(mg/L)	0.82	**0.45**	**0.39**	**0.81**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.028**	**0.022**	**0.028**	
Lead(mg/L)	<0.005	**<0.005**	**<0.005**	**<0.005**	**0.1**
Zinc(mg/L)	0.08	**0.02**	**0.45**	**0.17**	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 211
Surface Water Quality Data
Area: **Hingula**

Project/OCP	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	
NAME OF STATIONS	Singadhajhor stream nearer to village Chhotabani as u/s water for Hingula OCP	Singadhajhor stream nearer to village Chhotabani as u/s water for Hingula OCP	Singadhajhor stream nearer to village Chhotabani as u/s water for Hingula OCP	Singadhajhor stream nearer to village Chhotabani as u/s water for Hingula OCP	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**27.06.16**	**15.09.16**	**31.12.16**	**30.03.17**	
pH	7.82	**7.68**	**8.05**	**7.63**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.6	**4.5**	**4.5**	**5.2**	**4**
BOD (3 days 27°c(mg/L)	2.2	**3.4**	**3.2**	**3.1**	**3**
Color ,Hazen unit	6	**12**	**3**	**2**	**300**
Total disolved solids (mg/L)	1248	**342**	**292**	**540**	**1500**
TSS(mg/L)	30	**42**	**18**	**16**	**-**
Total Hardness(mg/L)	926	**200**	**184**	**312**	**-**
Copper(mg/L)	0.07	**0.08**	**<0.03**	**<0.03**	**1.5**
Iron(mg/L)	<0.06	**0.08**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	48	**26**	**28**	**44**	**600**
Sulphate(mg/L)	176	**86**	**40**	**148**	**400**
Nitrate(mg/L)	6.51	**5.61**	**4.76**	**5.37**	**50**
Fluoride(mg/L)	0.84	**0.9**	**0.58**	**0.71**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.038**	**0.032**	**0.031**	
Lead(mg/L)	<0.005	**<0.005**	**<0.005**	**<0.005**	**0.1**
Zinc(mg/L)	0.38	**0.17**	**0.02**	**0.03**	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 212
Surface Water Quality Data
Area: **Hingula**

Project/OCP	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	
NAME OF STATIONS	Pond water of Kankarei village	Pond water of Kankarei village	Pond water of Kankarei village	Pond water of Kankarei village	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**27.06.16**	**15.09.16**	**31.12.16**	**21.03.17**	
pH	6.74	**7.17**	**7.86**	**7.29**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.4	**4.8**	**4.7**	**5.1**	**4**
BOD (3 days 27°c(mg/L)	2.8	**3.1**	**2.8**	**3.6**	**3**
Color ,Hazen unit	7	**4**	**5**	**2**	**300**
Total disolved solids (mg/L)	278	**178**	**330**	**130**	**1500**
TSS(mg/L)	34	**22**	**22**	**28**	**-**
Total Hardness(mg/L)	120	**88**	**204**	**48**	**-**
Copper(mg/L)	0.05	**0.17**	**<0.03**	**<0.03**	**1.5**
Iron(mg/L)	<0.06	**<0.06**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	38	**22**	**36**	**24**	**600**
Sulphate(mg/L)	26	**48**	**30**	**12**	**400**
Nitrate(mg/L)	6	**5.52**	**6.43**	**3.99**	**50**
Fluoride(mg/L)	0.55	**0.47**	**0.41**	**0.61**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.031**	**0.03**	**0.032**	
Lead(mg/L)	<0.005	**<0.005**	**<0.005**	**<0.005**	**0.1**
Zinc(mg/L)	<.02	**0.02**	**0.03**	**0.02**	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 213
Surface Water Quality Data
Area: **Hingula**

Project/OCP	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP
NAME OF STATIONS	Singadhajhor stream nearer to village Chittalpur as d/s water for Hingula OCP	Singadhajhor stream nearer to village Chittalpur as d/s water for Hingula OCP	Singadhajhor stream nearer to village Chittalpur as d/s water for Hingula OCP	Singadhajhor stream nearer to village Chittalpur as d/s water for Hingula OCP
Date of sampling	27.06.16	15.09.16	31.12.16	30.03.17
pH	7.76	7.58	8.09	7.4
Dissolved Oxygen(mg/L)	4.6	4.4	5.1	4.8
BOD (3 days 27°c(mg/L)	2	3.2	3.9	2.4
Color ,Hazen unit	4	14	2	2
Total disolved solids (mg/L)	1220	298	286	530
TSS(mg/L)	24	38	32	12
Total Hardness(mg/L)	892	188	180	316
Copper(mg/L)	0.08	0.09	<0.03	<0.03
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06
Chlorides(mg/L)	36	20	26	38
Sulphate(mg/L)	177	54	42	140
Nitrate(mg/L)	5.52	4.82	4.43	5.87
Fluoride(mg/L)	0.77	0.63	0.61	0.58
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<0.001
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002
Cyanide(mg/L)	***	0.032	0.028	0.03
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005
Zinc(mg/L)	0.41	0.02	0.03	0.06
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01
Oil & Grease	<4.0	<4.0	<4.0	<4.0

Table: 214
Surface Water Quality Data
Area: **Talcher**

Project/OCP	Talcher Area	Talcher Area	Talcher Area		
NAME OF STATIONS	Nandira Jhor near Karnapur village as u/s of Nandira U/G mine	Nandira Jhor near Karnapur/ Sakasingha village as u/s of Nandira U/G mine	Nandira Jhor near Sakasingha village as u/s of Nandira U/G mine	Nandira Jhor near Sakasingha village as u/s of Nandira U/G mine	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	28.06.16	16.09.16	31.12.16	30.03.16	
pH	7.25	7.86	8.06	7.53	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.5	4.9	5.1	4.7	**4**
BOD (3 days 27°c(mg/L)	2	3.1	3.1	3.1	**3**
Color ,Hazen unit	7	8	4	4	**300**
Total disolved solids (mg/L)	334	336	352	352	**1500**
TSS(mg/L)	36	34	16	12	**-**
Total Hardness(mg/L)	164	184	188	180	**-**
Copper(mg/L)	0.05	0.03	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	**50**
Chlorides(mg/L)	44	30	42	50	**600**
Sulphate(mg/L)	31	48	56	68	**400**
Nitrate(mg/L)	6.51	7.96	6.13	5.27	**50**
Fluoride(mg/L)	0.68	0.67	0.03	0.76	**1.5**
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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	<0.002	<0.002	**0.2**
Cyanide(mg/L)	***	0.03	0.031	0.03	
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.1**
Zinc(mg/L)	<0.02	<0.01	0.03	<0.02	**15**
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	**0.05**
Oil & Grease	<4.0	<4.0	<4.0	<4.0	**0.1**

Table: 215
Surface Water Quality Data
Area: **Talcher**

Project/OCP	Talcher Area	Talcher Area	Talcher Area	Talcher Area	
NAME OF STATIONS	Nandira Jhor near Tentolei village as d/s of Nandira U/G mine	Nandira Jhor near Tentolei/ Pengua village as d/s of Nandira U/G mine	Nandira Jhor near Pengua village as d/s of Nandira U/G mine	Nandira Jhor near Tentolei village as d/s of Nandira U/G mine	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	**28.06.16**	**16.09.16**	**31.12.16**	**30.03.17**	
pH	6.98	**7.41**	**7.83**	**7.37**	**6.5-8.5**
Dissolved Oxygen(mg/L)	4.8	**5**	**4.8**	**5.1**	**4**
BOD (3 days 27°c(mg/L)	2.2	**3.2**	**2.8**	**3.5**	**3**
Color ,Hazen unit	8	**5**	**4**	**6**	**300**
Total disolved solids (mg/L)	238	**164**	**350**	**368**	**1500**
TSS(mg/L)	40	**26**	**18**	**16**	**-**
Total Hardness(mg/L)	84	**80**	**180**	**184**	**-**
Copper(mg/L)	0.05	**0.12**	**<0.03**	**<0.03**	**1.5**
Iron(mg/L)	<0.06	**<0.06**	**<0.06**	**<0.06**	**50**
Chlorides(mg/L)	36	**22**	**40**	**62**	**600**
Sulphate(mg/L)	26	**36**	**52**	**68**	**400**
Nitrate(mg/L)	5.61	**4.82**	**5.76**	**4.48**	**50**
Fluoride(mg/L)	0.77	**1.2**	**0.28**	**0.84**	**1.5**
Phenolic Compound(mg/L)	<0.001	**<0.001**	**<0.001**	**<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**	**<0.002**	**<0.002**	**0.2**
Cyanide(mg/L)	***	**0.032**	**0.033**	**0.032**	
Lead(mg/L)	<0.005	**<0.005**	**<0.005**	**<0.005**	**0.1**
Zinc(mg/L)	<0.02	**0.04**	**0.03**	**<0.02**	**15**
Hexavalent Chromium(mg/L)	<0.01	**<0.01**	**<0.01**	**<0.01**	**0.05**
Oil & Grease	<4.0	**<4.0**	**<4.0**	**<4.0**	**0.1**

Table: 216
Surface Water Quality Data
Area: **Talcher**

Project/OCP	Talcher Area	Talcher Area	Talcher Area	Talcher Area	
NAME OF STATIONS	Pond water of Dera village	Pond water of Dera village	Pond water of Dera village	Pond water of Dera village	IS:2296-1982 Tolerance for inland Surface water (Class C)
Date of sampling	27.06.16	16.09.16	31.12.16	30.03.17	
pH	7.29	7.45	7.71	7.55	6.5-8.5
Dissolved Oxygen(mg/L)	4	4.9	4.6	4.3	4
BOD (3 days 27°c(mg/L)	2.6	3.2	3.1	2.9	3
Color ,Hazen unit	10	4	2	8	300
Total disolved solids (mg/L)	336	174	238	156	1500
TSS(mg/L)	38	18	22	12	-
Total Hardness(mg/L)	172	84	144	56	-
Copper(mg/L)	0.05	0.04	<0.03	<0.03	1.5
Iron(mg/L)	<0.06	0.06	<0.06	<0.06	50
Chlorides(mg/L)	34	16	34	36	600
Sulphate(mg/L)	40	58	18	11	400
Nitrate(mg/L)	5.76	3.99	4.76	3.99	50
Fluoride(mg/L)	0.57	0.31	0.26	0.73	1.5
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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	<0.002	<0.002	0.2
Cyanide(mg/L)	***	0.041	0.033	0.03	
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	0.1
Zinc(mg/L)	<0.02	0.03	0.03	<0.02	15
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	0.05
Oil & Grease	<4.0	<4.0	<4.0	<4.0	0.1

Table: 217
Surface Water Quality Data
Area: **Talcher**

Project/OCP	**Talcher Area**	**Talcher Area**	**Talcher Area**	**Talcher Area**	**IS:2296-1982 Tolerance for inland Surface water (Class C)**
NAME OF STATIONS	**Pond water of Gopinathpur village**	**Pond water of Gopinathpur village**	**Pond water of Gopinathpur village**	**Pond water of Gopinathpur village**	
Date of sampling	28.06.16	15.09.16	31.12.16	30.03.17	
pH	7.44	7.85	8.12	7.1	**6.5-8.5**
Dissolved Oxygen(mg/L)	7.6	4.3	4.9	4.9	**4**
BOD (3 days 27ºc(mg/L)	2.4	3.1	2.9	3.2	**3**
Color ,Hazen unit	9	10	3	10	**300**
Total disolved solids (mg/L)	206	342	274	252	**1500**
TSS(mg/L)	40	38	16	18	**-**
Total Hardness(mg/L)	80	180	152	128	**-**
Copper(mg/L)	0.05	<0.03	<0.03	<0.03	**1.5**
Iron(mg/L)	<0.06	0.12	<0.06	<0.06	**50**
Chlorides(mg/L)	26	30	30	34	**600**
Sulphate(mg/L)	12	62	46	46	**400**
Nitrate(mg/L)	6	8.78	5.87	4.76	**50**
Fluoride(mg/L)	0.66	0.91	0.31	0.39	**1.5**
Phenolic Compound(mg/L)	<0.001	<0.001	<0.001	<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	<0.002	<0.002	**0.2**
Cyanide(mg/L)	***	0.04	0.032	0.034	
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	**0.1**
Zinc(mg/L)	<0.02	0.02	0.03	<0.02	**15**
Hexavalent Chromium(mg/L)	<0.01	<0.01	<0.01	<0.01	**0.05**
Oil & Grease	<4.0	<4.0	<4.0	<4.0	**0.1**

TABLE:218

Project: Bhubaneswari OCP
Monitoring Station: Naraharipur village well

Date of sampling	Water level
22-06-2016	8.15
22-08-2016	1.7
24-11-2016	5.16
20-01-2017	2.85

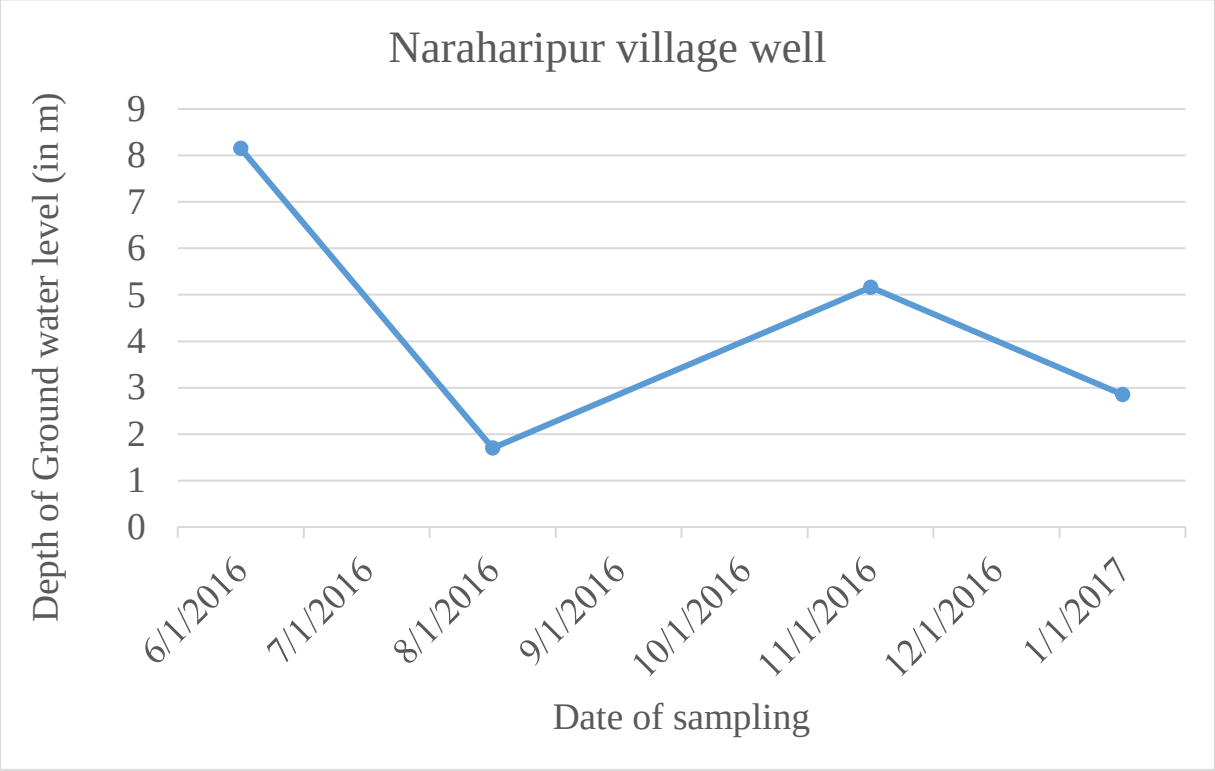


TABLE:219

Project: Jagannath OCP

Monitoring Station: Rakas village well

Date of sampling	Water level
24-06-2016	7.55
22-08-2016	2.21
28-11-2016	6.51
24-01-2017	2.55

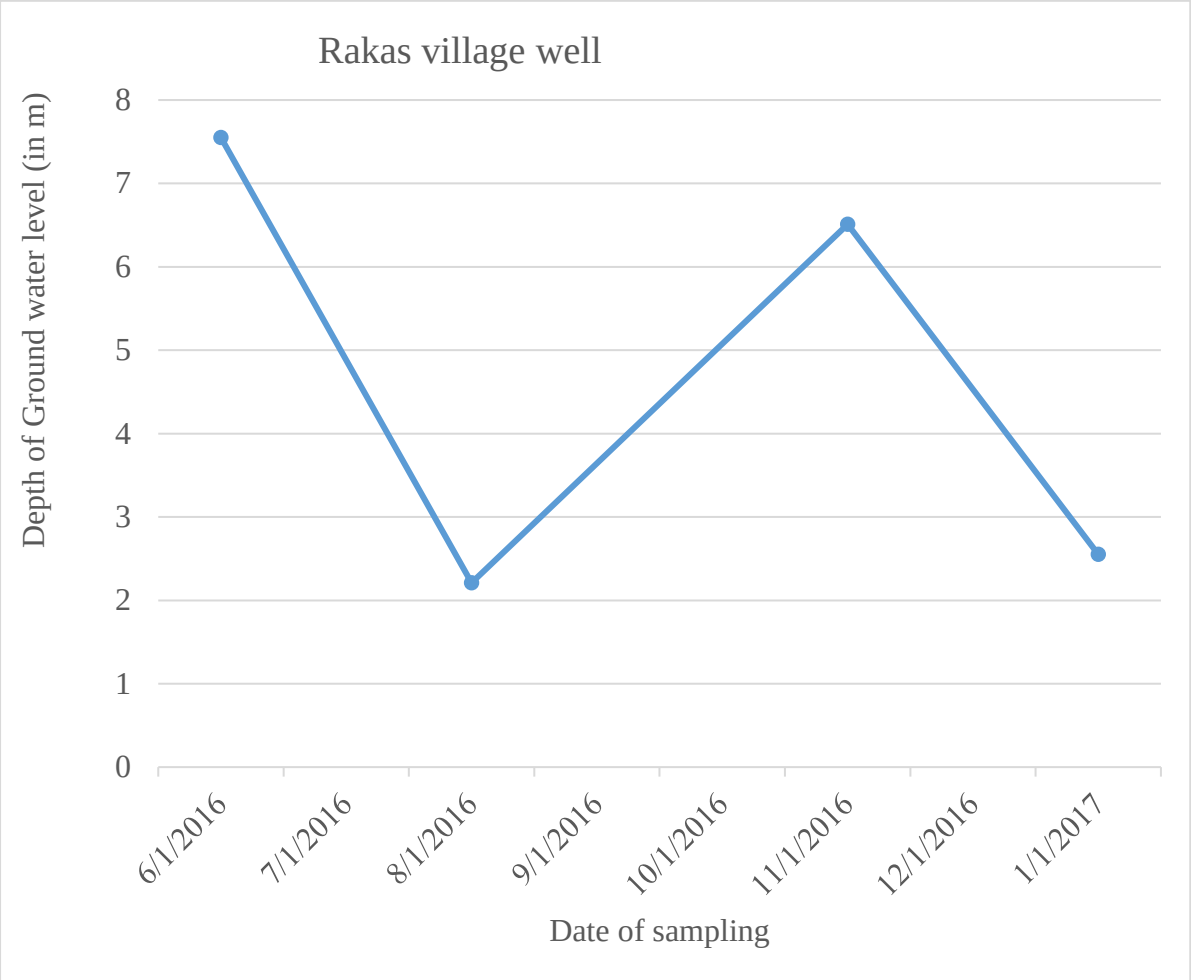


TABLE: 220

Project: Ananta OCP

Monitoring Station: Dera village well

Date of sampling	Water level
23-06-2016	4.75
18-08-2016	2.34
25-11-2016	2.88
30-01-2017	1.74

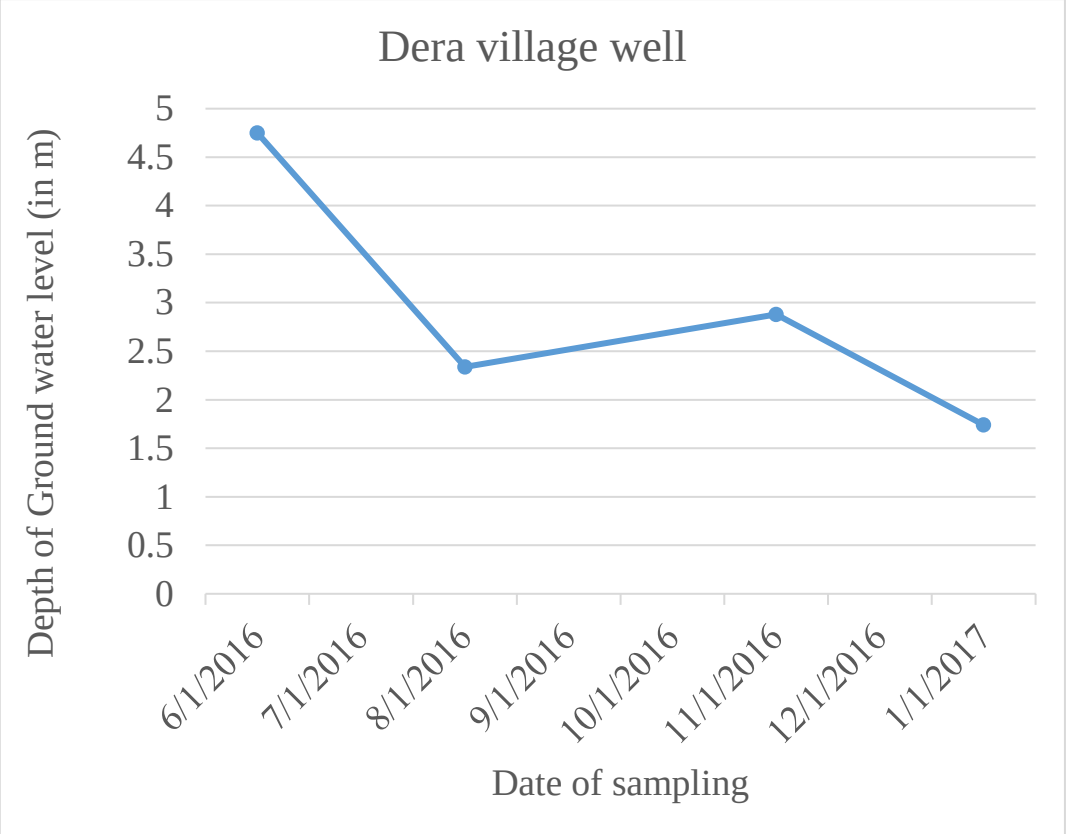


TABLE: 221

Project: Ananta OCP

Monitoring Station: Hensamul village well

Date of sampling	Water level
23-06-2016	4.9
18-08-2016	2.06
25-11-2016	4.56
20-01-2017	2.19

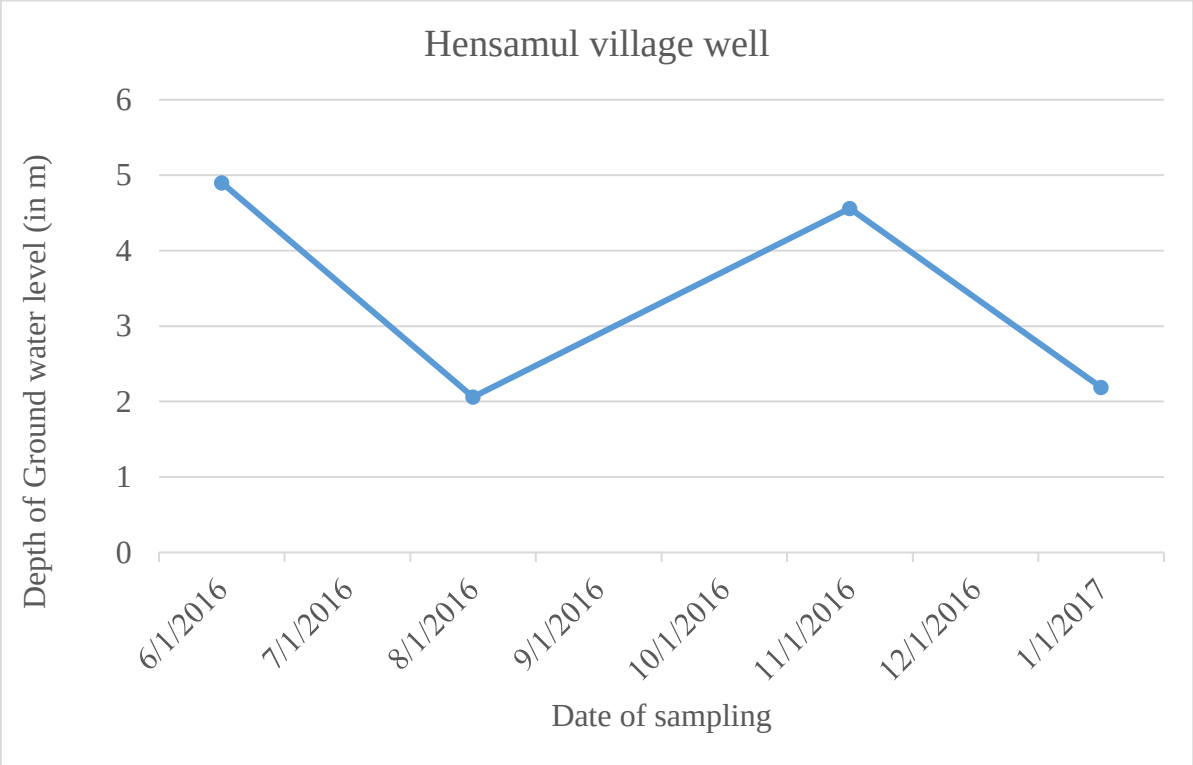


TABLE: 222

Project: Lingaraj OCP

Monitoring Station: Balunga Khamar village well

Date of sampling	Water level
28-06-2016	6.8
19-08-2016	1.91
29-11-2016	5.22
27-01-2017	1.89

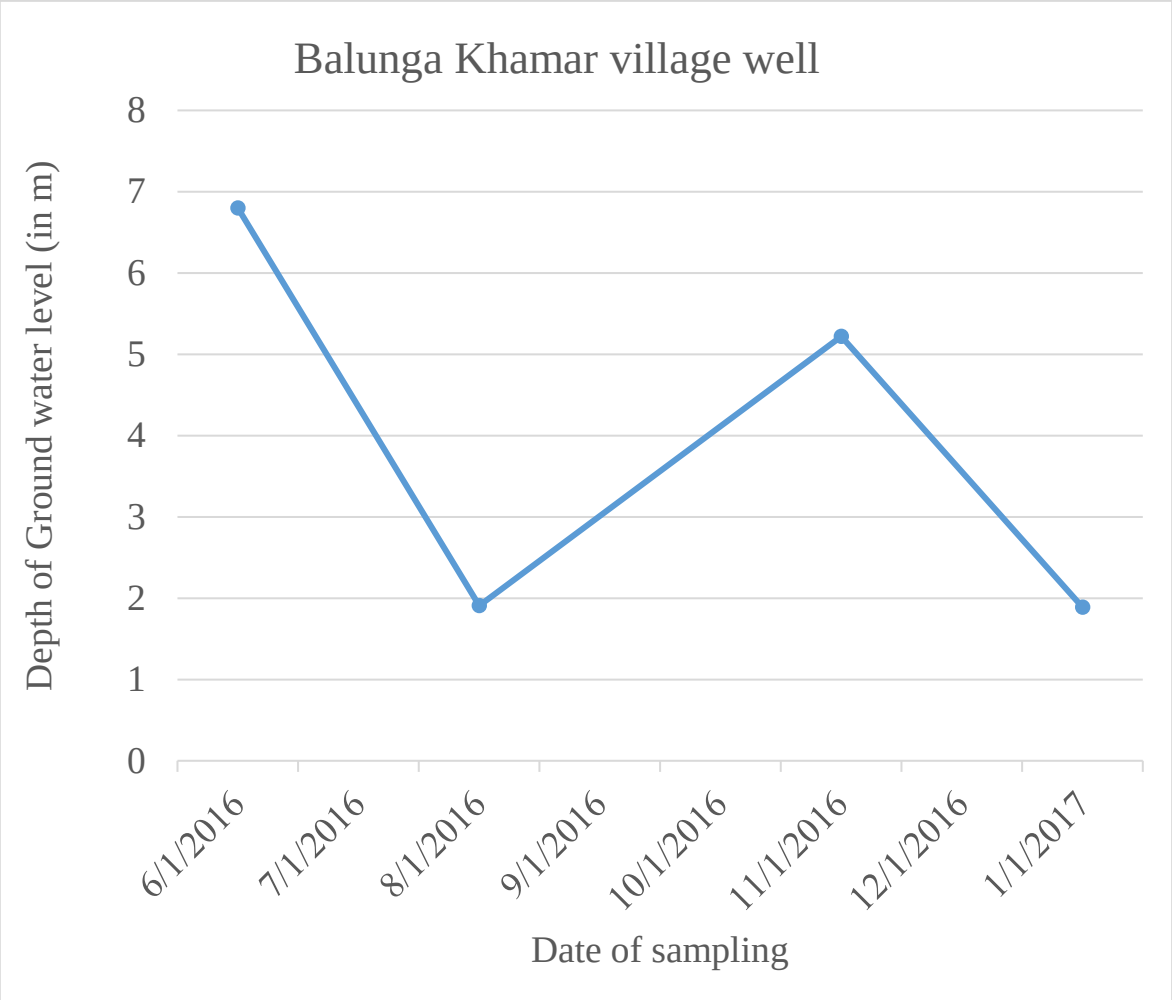


TABLE: 223

Project: Kaniha OCP

Monitoring Station: Jamunia village well

Date of sampling	Water level
21-06-2016	6.05
23-08-2016	2.24
22-11-2016	4.29
25-01-2017	2.04

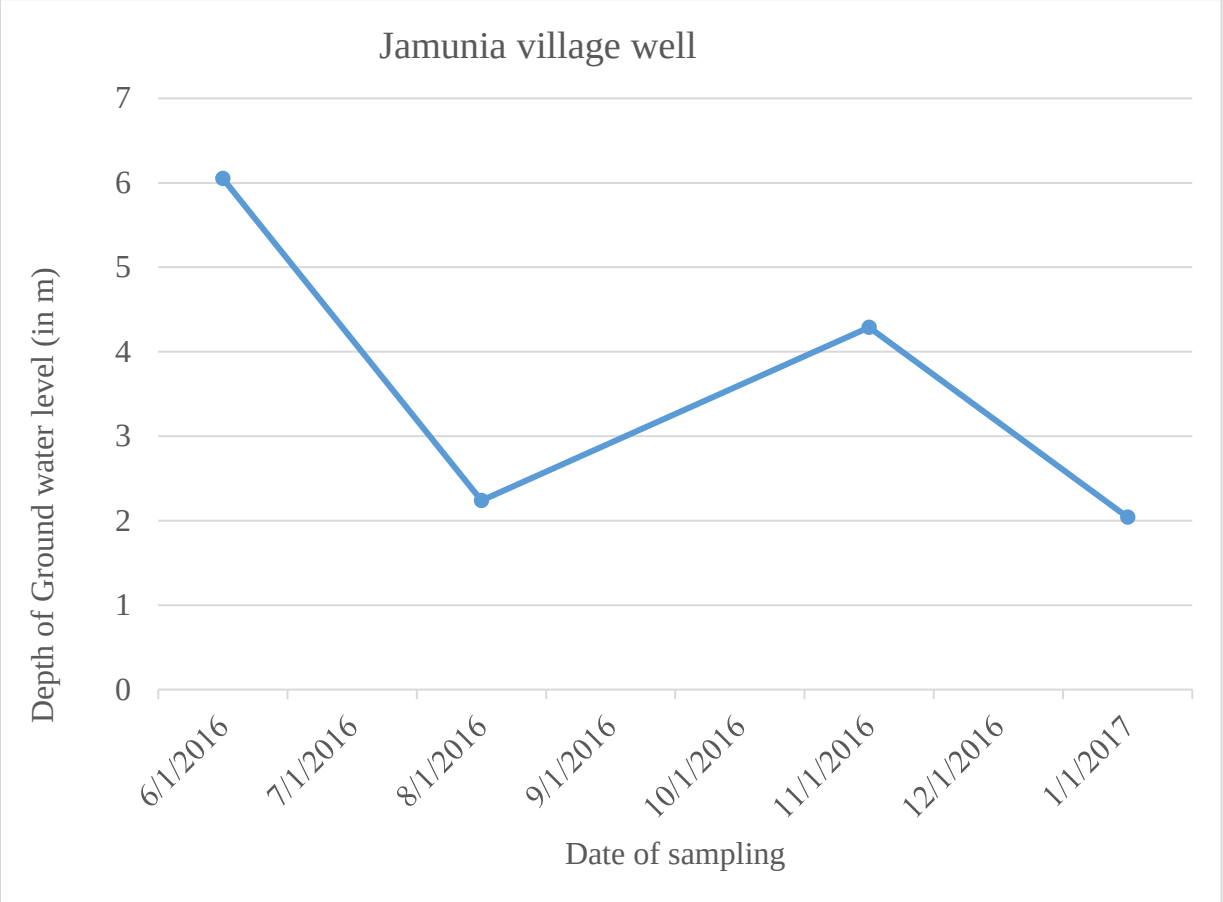


TABLE:224

Project: Kaniha OCP

Monitoring Station: Jarada village well

Date of sampling	Water level
21-06-2016	5.1
23-08-2016	2.95
22-11-2016	2.76
25-01-2017	2.22

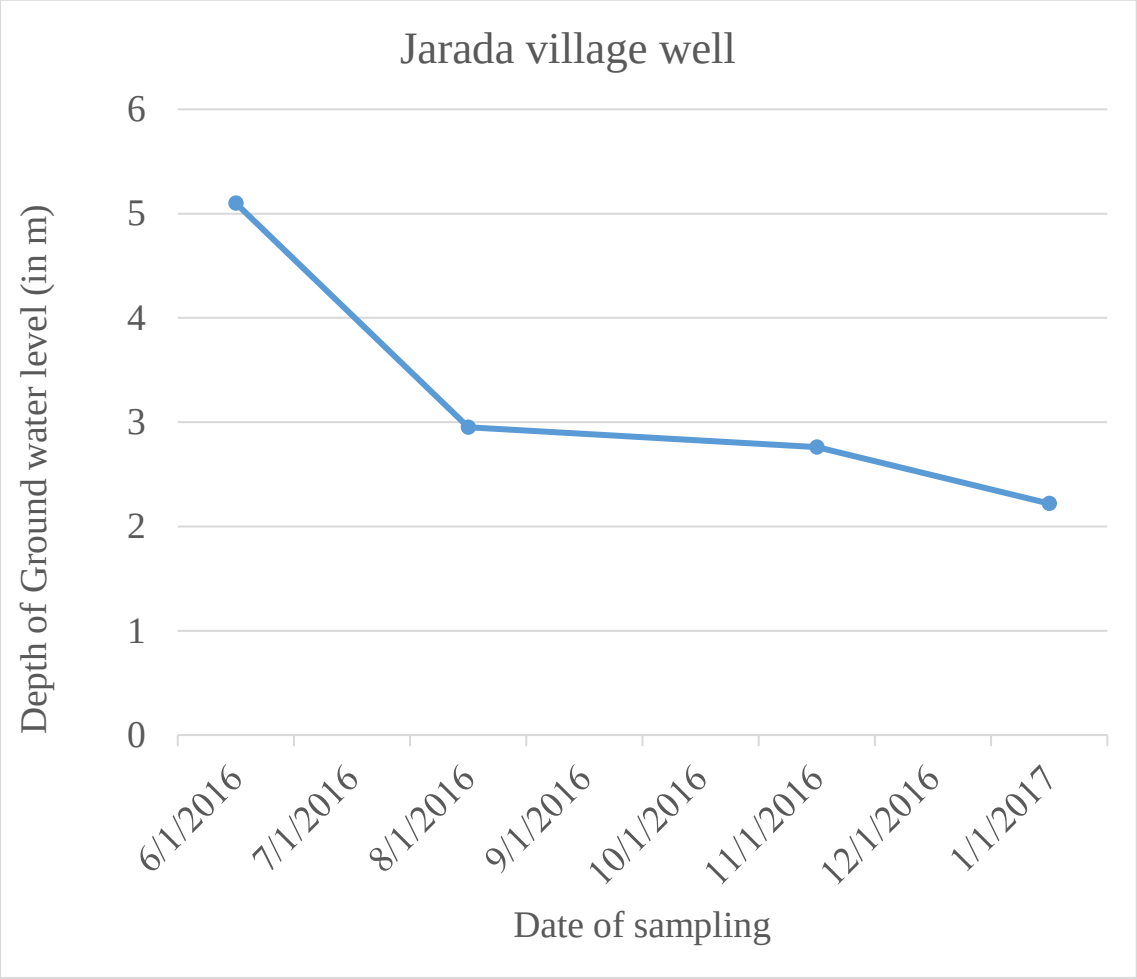


TABLE:225

Project: Kaniha OCP

Monitoring Station: Kansamunda village well

Date of sampling	Water level
21-06-2016	5.9
23-08-2016	2.9
22-11-2016	2.76
25-01-2017	2.4

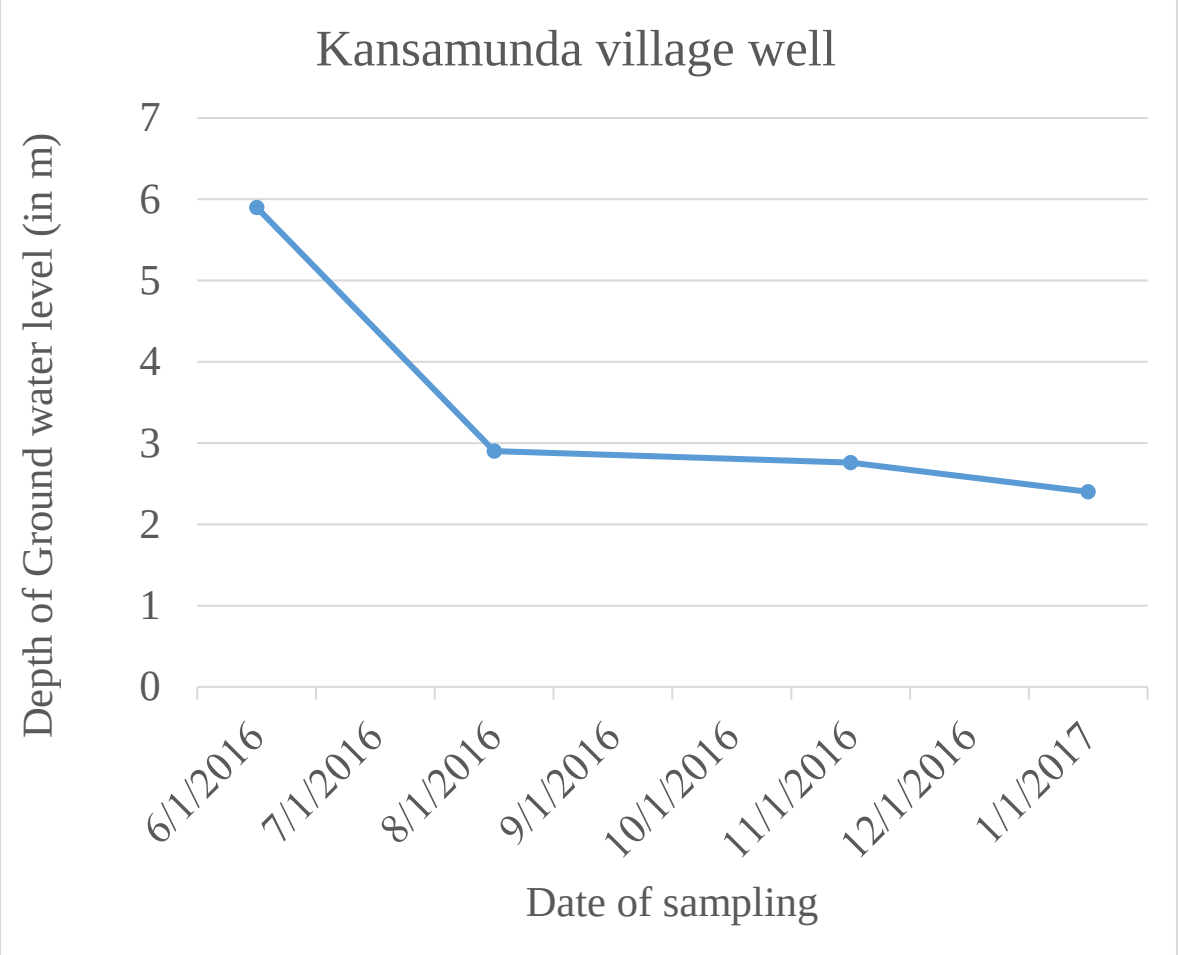


TABLE:226

Project: Balaram OCP
Monitoring Station: Danara village well

Date of sampling	Water level
20-06-2016	8.05
18-08-2016	1.85
21-11-2016	5.67
19-01-2017	2.18

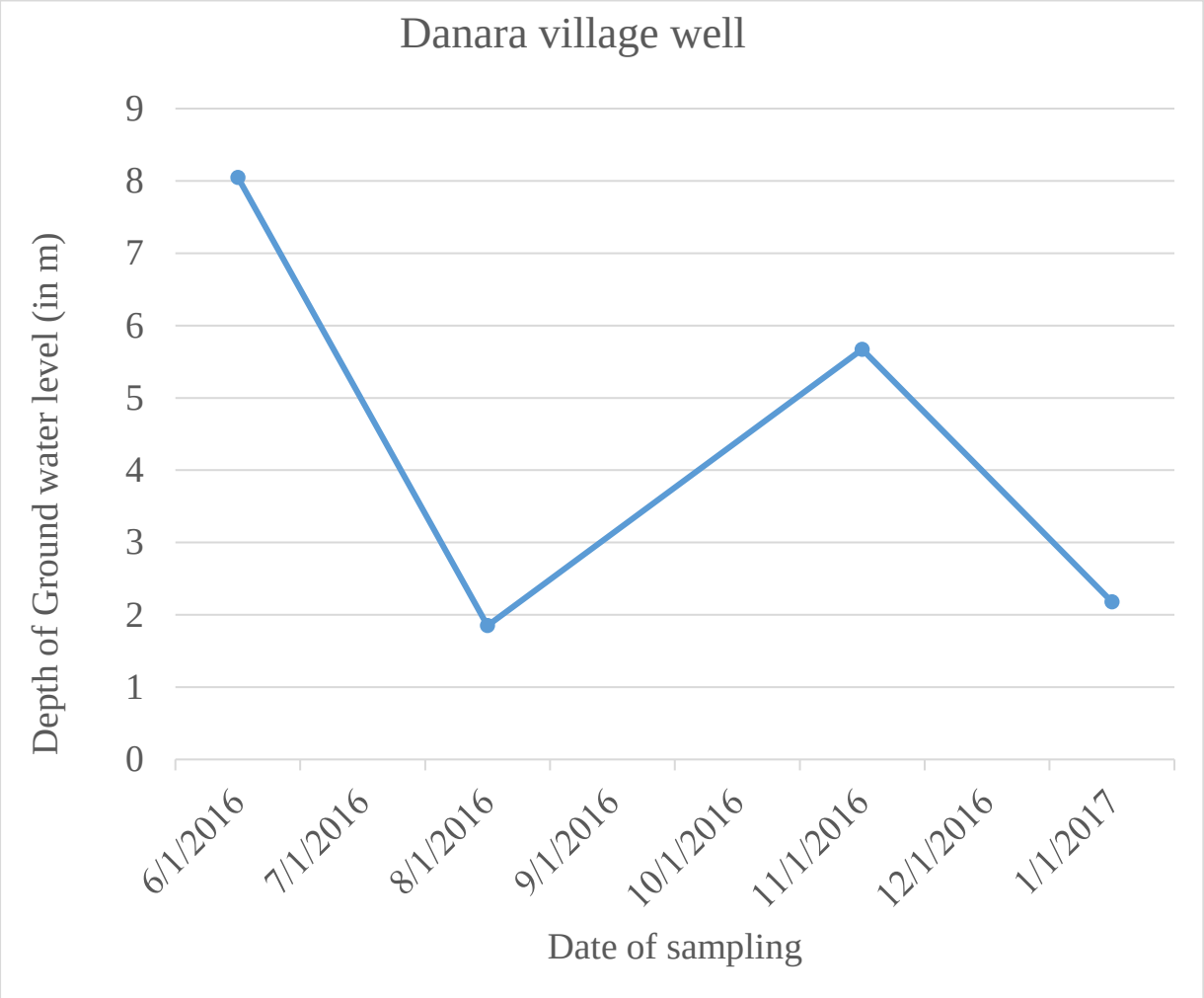


TABLE:227

Project: Balaram OCP
Monitoring Station: Nakaiposi village well

Date of sampling	Water level
20-06-2016	7.25
22-08-2016	1.3
21-11-2016	3.09
20-01-2017	3.18

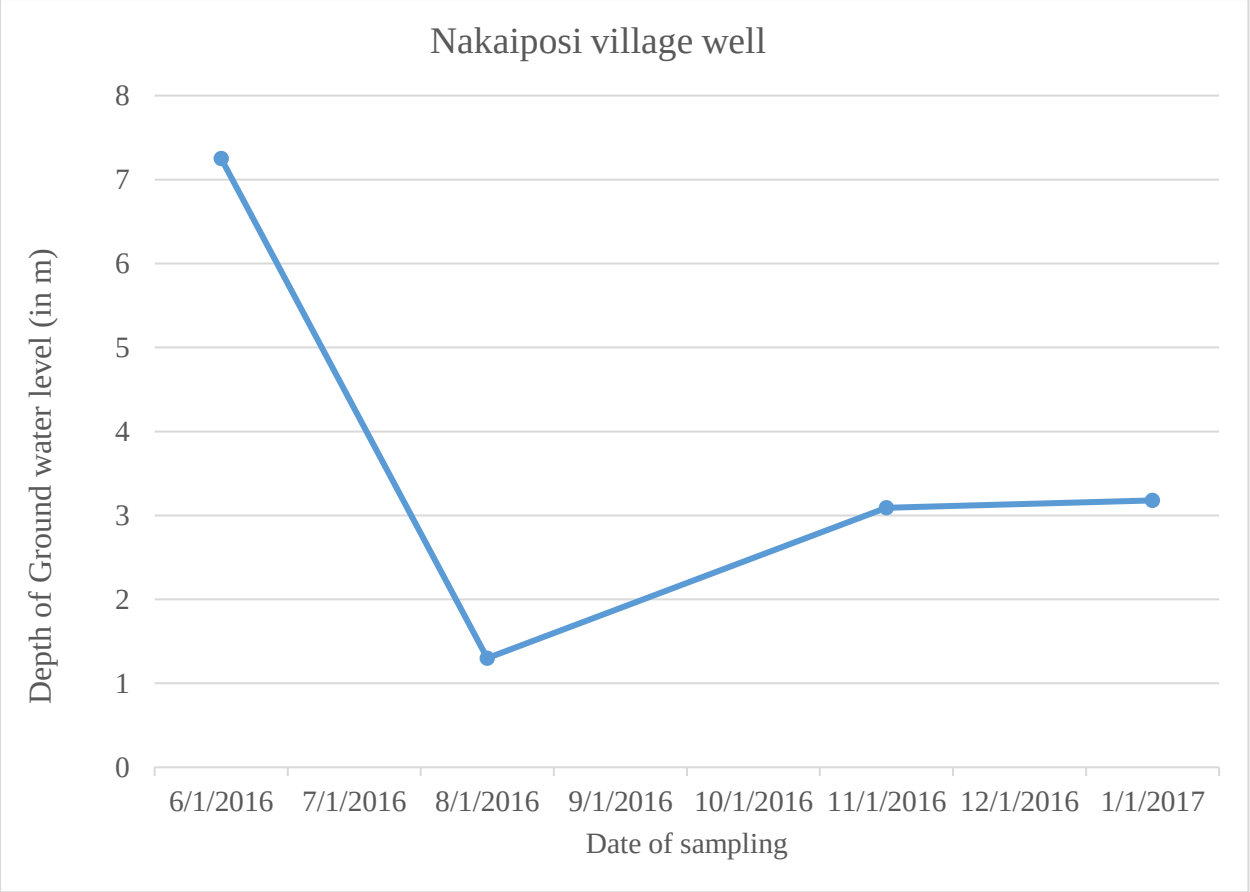


TABLE:228

Project: Hingula OCP
Monitoring Station: Gopalprasad village well water

Date of sampling	Water level
17-06-2016	6.5
18-08-2016	2.92
18-11-2016	3.15
18-01-2017	1.89

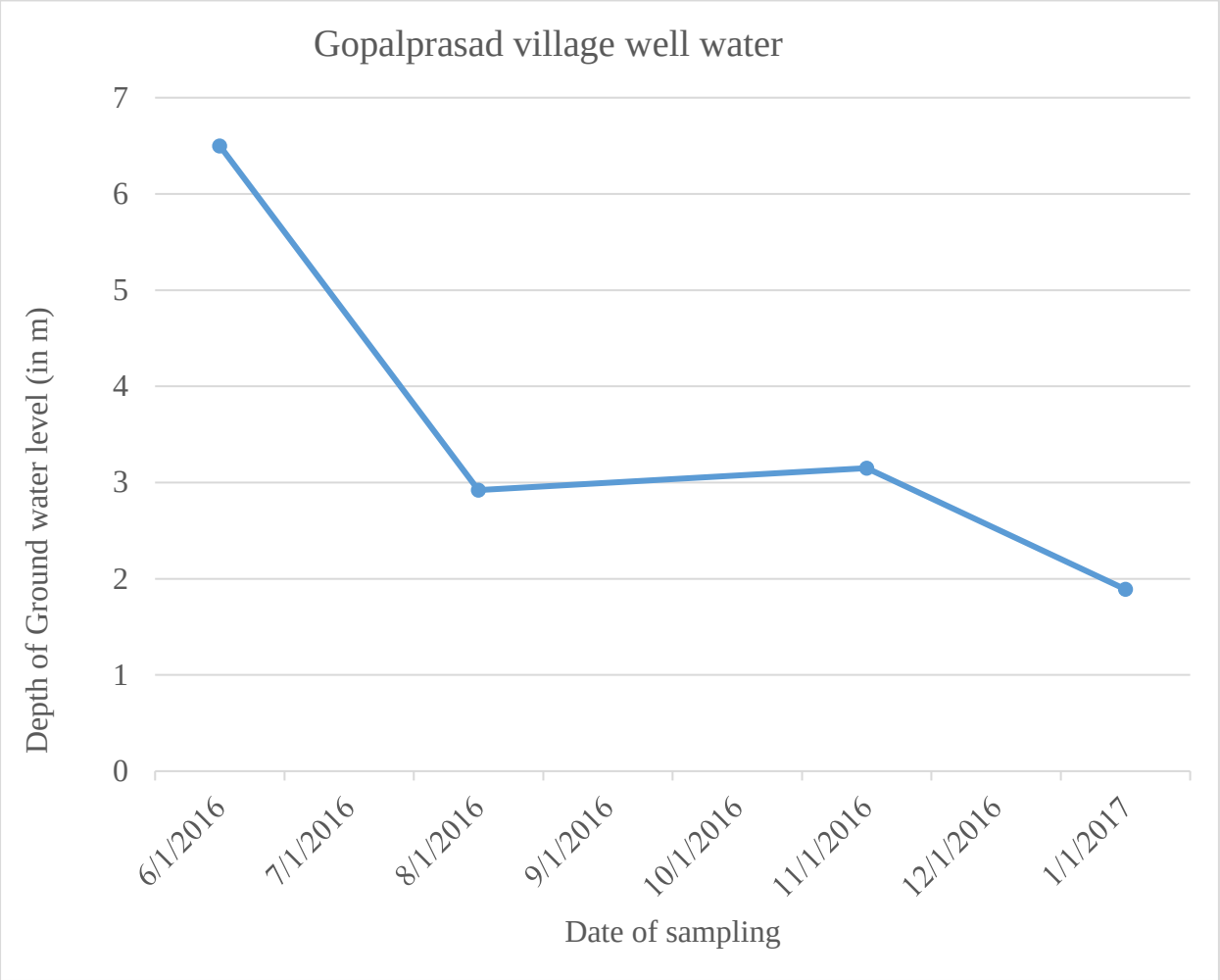


TABLE:229

Project: Hingula OCP

Monitoring Station: Kusumpal village well near OB dump

Date of sampling	Water level
17-06-2016	7.15
18-08-2016	2.03
18-11-2016	2.91
18-01-2017	2.88

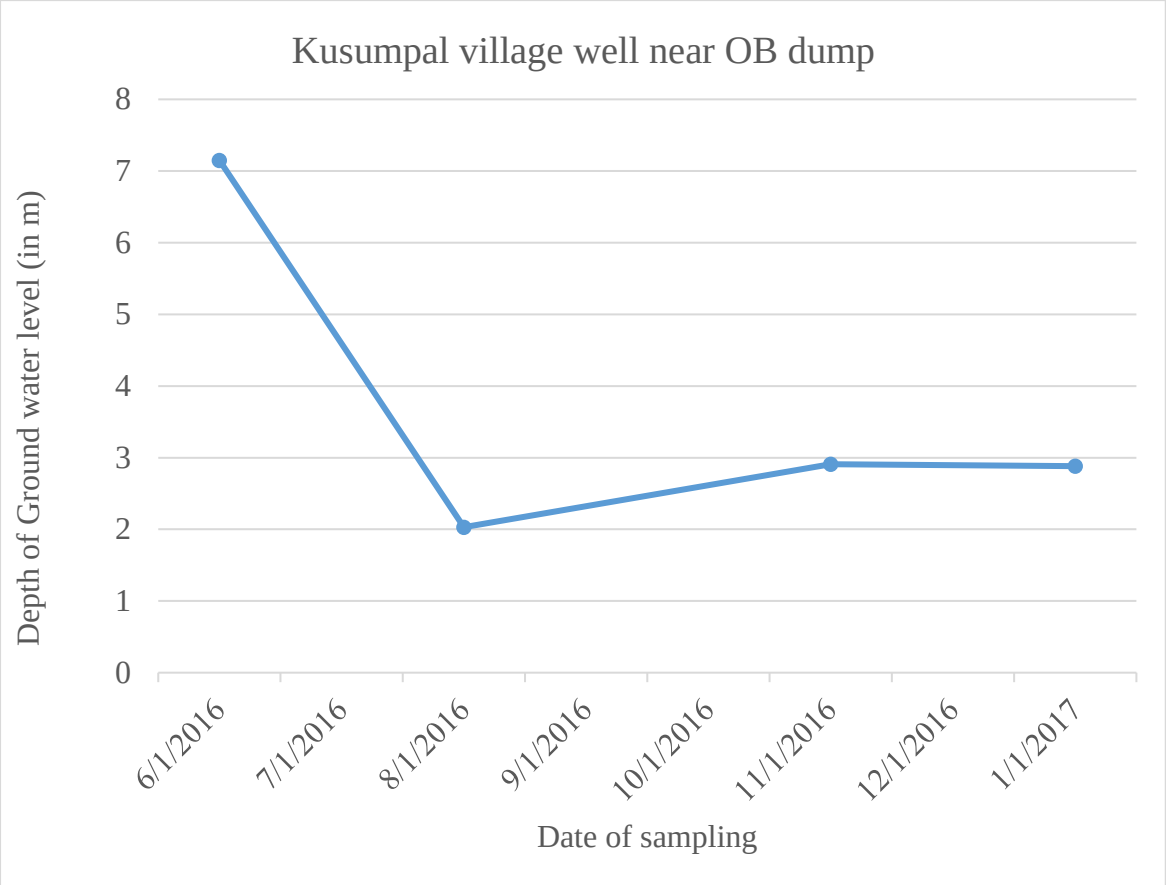


TABLE:230

Area: Talcher

Monitoring Station: Deulbera colony well

Date of sampling	Water level
29-06-2016	4.55
29-11-2016	2.88
30-01-2017	2.04

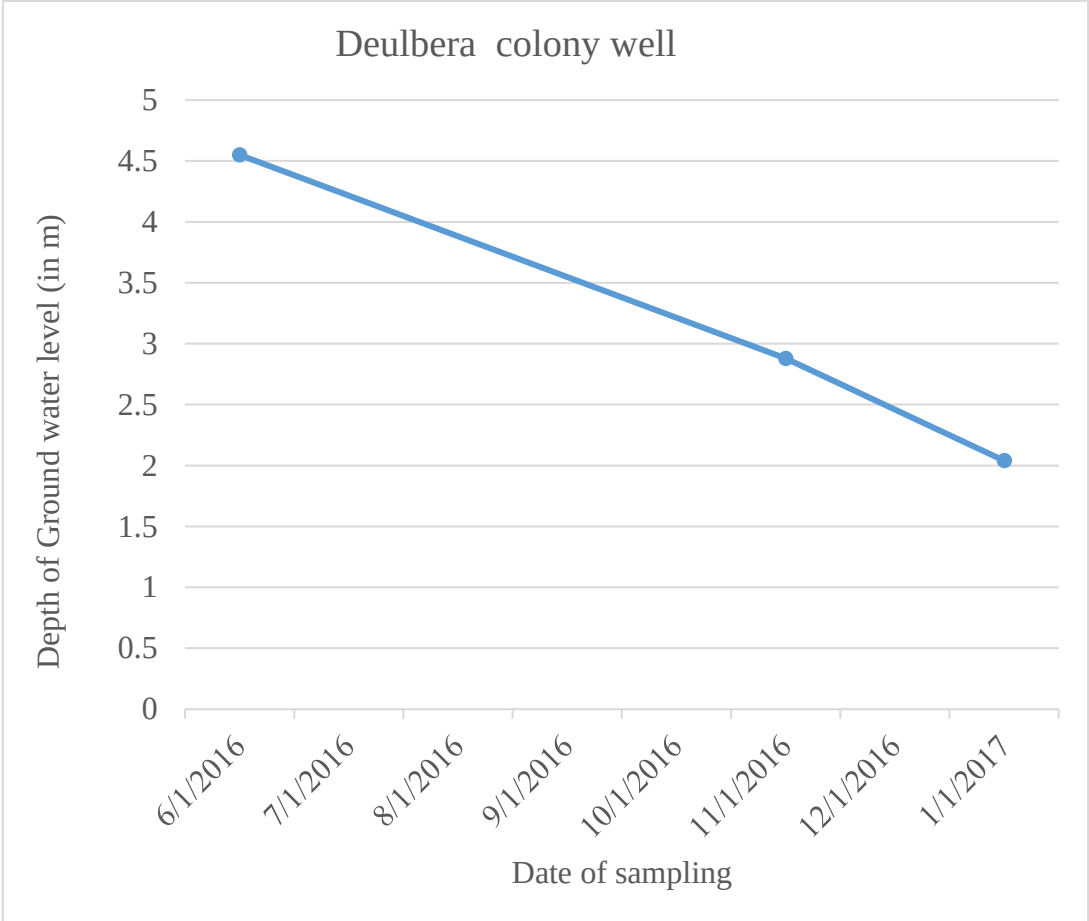


TABLE:231

Area: Talcher

Monitoring Station: Naraharipur village well

Date of sampling	Water level
29-06-2016	8.15
22-08-2016	1.7
29-11-2016	5.16
20-01-2017	2.85

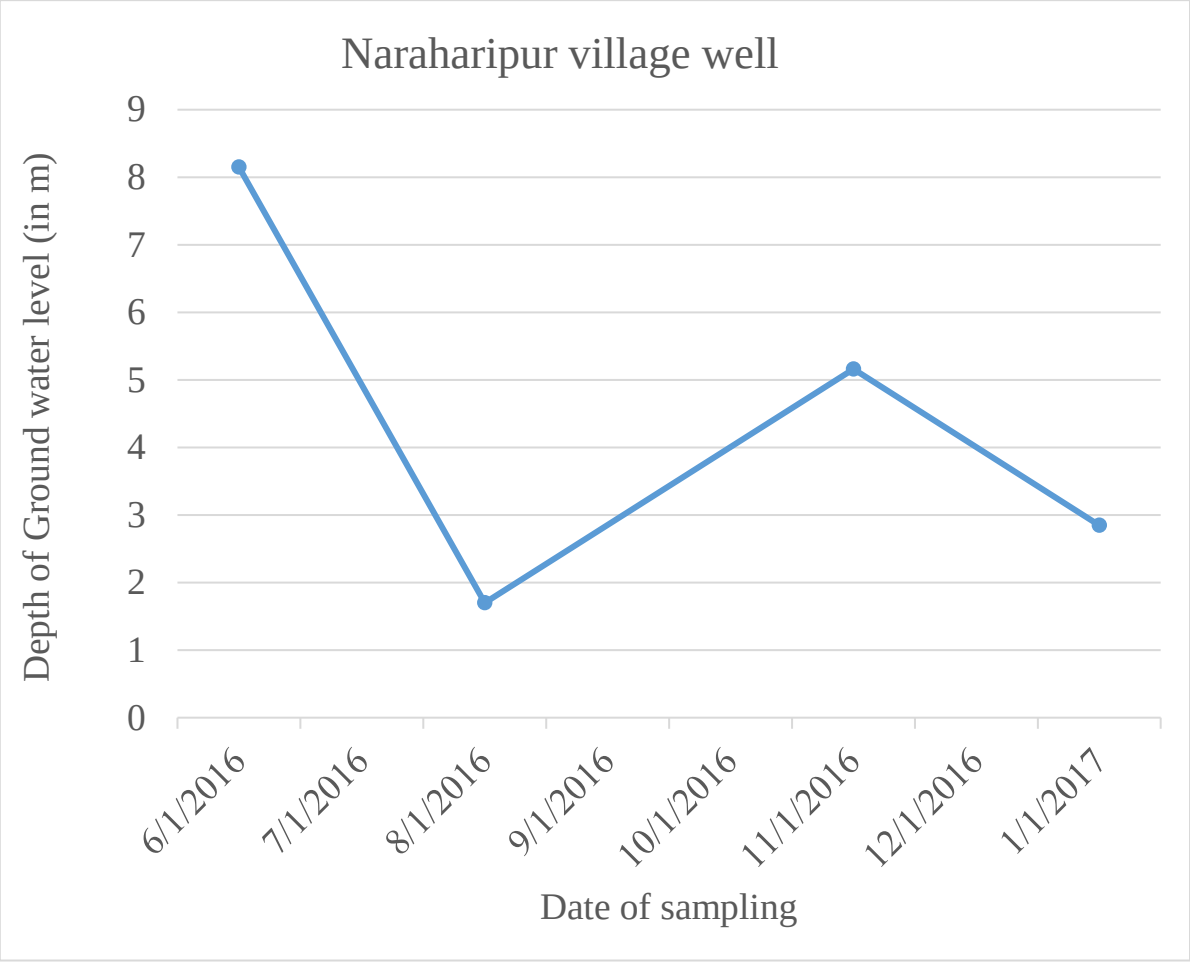


TABLE:232

Area: Talcher

Monitoring Station: Natedi village well

Date of sampling	Water level
29-06-2016	3.45
25-08-2016	3.86
29-11-2016	4.71
30-01-2017	3.39