

Billing Proforma for Ambient Air Quality Monitored by : Jharkhand State Pollution Control Board

Name of city : Dhanbad
Name of State : Jharkhand

S.No.	Sampling Location	Station Type	Station Code	Month	Year	Parameters Monitored	Remarks
1	Regional Office Dhanbad	R	44	April	2008	Meteorological Data SO ₂ , NO _x , RSPM, SPM	
2	MADA, Jharia	I	332	April	2008	SO ₂ , NO _x , RSPM, SPM	
3	PDIL, Sindi	R	46	April	2008	SO ₂ , NO _x , RSPM, SPM	

Kindly fill in 'R' if station falls in Residential Area 'I' if station in Industrial Area 'S' if station falls in Sensitive area

Total number of monitoring stations. = 03 (Three)

Amount to be released = Rs 4266 × 3 = 12798.00

In words (Rs. Twelve Thousand Seven Hundred Ninty Eight Only)

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TABLE C : Summary of Ambient Air Quality Data Monitored by : Jharkhand State Pollution Control Board

Name of City : Dhanbad
 Name of State : Jharkhand

S. No.	Sampling Location Address	Station Type	Station Code	Month and Year	SO ₂				NO _x				RSPM					SPM				
					n	A.M.	S.D.	Max.	n	A.M.	S.D.	Max.	n	A.M.	G.M.	S.D.	Max.	n	A.M.	G.M.	S.D.	Max.
1	R.O Dhanbad	R	44	April 2008	34	19.75	5.13	35.56	34	46.79	9.87	72.38	18	139.30	132.50	46.57	253.00	18	225.99	216.87	65.35	320.00
2	MADA Jharia	I	332	April 2008	14	17.58	3.22	26.15	14	42.16	7.95	64.76	7	108.22	108.14	5.00	118.00	7	188.88	187.35	29.54	239.00
3	PDIL Sindri	R	46	April 2008	41	18.36	2.59	34.56	41	45.05	7.39	89.44	22	118.47	112.38	40.67	209.00	22	188.14	180.11	59.24	274.00

* Kindly fill in 'R' if station falls in Residential Area 'I' if station in Industrial Area 'S' if station falls in Sensitive area

* Kindly fill in Whether conditions as Clear / Cloudy/ Rainy/ Cycione/ Dust Storm/ Calm condition (one or more may be applicable)

Note n = No of observation (in days)
 A.M = Arithmetic mean in ug/m³
 S.D = Standard Deviation
 Max = Max value (24 hours average in ug/m³)
 G.M = Geometric Mean in ug/m³

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TABLE D : Meteorological Data Monitored by : Jhankhand State Pollution Control Board

Sampling Location Address : Regional Office, Dhanbad

Name of City : Dhanbad
Name of State : Jharkhand

Station Type : R
Station Code : 44
Month : April
Year : 2008

S. NO	Hrs	06-10				10-14				14.18				18.22				22.02				06.02				Weather	Cibduth	Min Temp	Max Temp	Remarks
		Date	Temp	R.H	W.S	W.D.	Temp	R.H	W.S.	W.D.	Temp	R.H	W.S	W.D.	Temp	R.H	W.S	W.D.	Temp	R.H	W.S	W.D.	Temp.	R.H	W.S					
1	4/5-04-08	19.50	82.75	1.250	WWN	23.50	75.75	0.925	WWS	24.500	75.00	5.275	NNE	22.500	70.50	4.125	NNE	21.25	69.25	1.075	NNE	20.00	70.75	0.525	NNE	Clear	19	25		
2	9/10-04-08	23.50	61.50	1.725	NNE	26.75	72.00	3.400	WWS	28.25	83.50	1.425	NNE	23.50	78.25	1.925	WWS	20.50	72.50	2.250	WWS	19.50	78.76	0.850	WWS	Clear	19	29		
3	11/12-04-08	22.75	88.25	0.600	WWN	25.620	76.75	0.300	WWN	31.25	62.25	0.575	NNW	31.250	66.50	0.625	WWN	26.00	71.75	0.925	NNW	22.000	74.25	1.100	NNW	Clear	20	33		
4	15/16-04-08	22.950	86.00	1.150	SSW	27.75	76.50	0.650	WWN	32.25	67.00	0.475	WWN	30.00	68.75	0.700	WWN	27.500	72.000	0.950	WWN	23.500	73.000	1.050	WWN	Clear	20	33		
5	17/18-04-08	21.50	83.00	1.125	NNE	24.500	84.25	1.500	EEN	27.00	73.25	1.600	EEN	22.75	78.00	2.325	EEN	21.25	75.00	1.675	WWN	20.000	72.00	1.725	WWN	Clear	18	32		
6	21/22-04-08	21.250	80.50	0.975	NNE	30.50	68.75	2.175	WWS	36.500	59.00	2.675	WWN	31.25	61.75	2.700	WWS	24.750	69.50	2.900	WWN	20.50	80.75	0.750	WWN	Clear	19	38		
7	24/25-04-08	23.000	90.75	1.000	NNE	34.75	89.50	0.875	WWN	39.50	51.25	1.150	WWN	34.50	60.25	0.575	WWN	30.50	61.25	0.400	WWN	26.50	76.25	0.3375	WWN	Clear	20	41		
8	29/30-04-08	28.500	78.50	6.575	SSE	38.750	60.50	1.900	NNE	38.000	47.00	1.975	NNE	32.75	48.50	1.025	NNE	29.750	80.87	1.300	NNE	26.500	76.75	0.650	NNE	Clear	22	40		

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* Kindly fill in Whether conditions as Clear / Cloudy / Rainy/ Cyclopedia/ Dust Storm/ Calm condition (one or more may be applicable)

Note
Tomp = Average Temperature (in C)
R.H = Average Relative Humidity (in %)
W.S = Average Wind Speed (in Km/Hr)
W.D = Predominant Wind Direction

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TABLE A : Ambient Air Quality Data for SO₂ and NO_x Monitoring by : Jharkhand State Pollution Control Board

Sampling Location Address : Regione Office Dhanbad

City : Dhanbad

State : Jharkhand

Station Code : 44

Station Type : R

Month: April

Year : 2008

Parameter	Units
SO ₂	ug/M ³
NO _x	ug/ m ³

S. No	Hrs. Date	SO ₂								NO _x								Weather Conditions	Remarks
		06-10	10-14	14-18	18-22	22-02	02-06	4 Hrs Max	24 Hrs-Avg	06-10	10-14	14-18	18-22	22-02	02-06	4 Hrs. Max	24 Hrs. Avg		
1	4/5-04-08	18.83	16.73	18.13	15.89	16.73	19.07	19.07	17.56	46.52	46.98	36.82	37.61	40.95	45.63	49.52	42.91	Clear	
2	11/12-04-08	21.96	20.22	18.13	-	12.53	16.05	21.96	17.77	55.23	40.63	44.44	-	32.73	38.63	55.23	42.33	Clear	
3	15/16-04-08	17.43	29.29	15.16	-	31.38	17.43	31.38	22.13	36.82	66.66	31.42	-	72.38	49.52	72.38	51.36	Clear	
4	17/18-04-08	-	-	23.01	35.56	21.62	16.18	35.56	24.09	-	-	44.44	55.53	50.74	37.58	55.53	47.08	Clear	
5	21/22-04-08	-	-	18.83	21.01	14.16	15.80	21.01	17.45	-	-	43.17	49.41	35.71	38.69	49.41	41.74	Clear	
6	24/25-04-08	26.15	28.24	24.06	30.33	26.15	29.29	30.33	27.37	62.85	60.95	66.66	66.66	68.57	72.38	72.38	86.34	Clear	
7	29/30-04-08	-	-	16.04	13.39	14.64	15.69	16.04	11.93	-	-	38.09	34.53	34.28	36.19	38.09	35.77	Clear	
8																			
9																			
10																			

* Kindly fill in 'R' if station falls in Residential Area 'I' if station in Industrial Area 'S' if station falls in Sensitive area

* Kindly fill in Whether conditions as Clear / Cloudy / Rainy/ Cyclicone/ Dust Storm/ Calm condition (one or more may be applicable)

Note : 1- Kindly indicate reason if monitoring is not carried out for 24 hrs in a day or less than 8 days in a month

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TABLE B : Ambient Air Quality Data for RSPM and SPM Monitoring by : Jharkhand State Pollution Conrtol Board

Sampling Location Address : Regione Office Dhanbad

City : Dhanbad

State : Jharkhand

Station Code : 44

Station Type : R

Month : April

Year : 2008

Parameter	Units
SO2	ug/m ³
NOx	ug/ m ³

S. No	Hrs.	RSPM					SPM					Weather Conditions	Remarks
		Date	06-14	14-22	22-06	8 Hrs Max	24 Hrs Avg	06-14	14-22	22-06	8Hrs. Avg		
1	4/5-04-08	113.00	58.00	53.00	113.00	74.66	171.00	115.00	100.00	171.00	128.66	Clear	
2	11/12-04-08	146.00	203.00	136.00	203.00	161.00	257.00	295.00	231.00	295.00	261.00	Clear	
3	15/16-04-08	198.00	116.00	116.00	198.00	143.33	330.00	270.00	262.00	330.00	287.33	Clear	
4	17/18-04-08	-	54.00	152.00	152.00	103.00	-	104.00	217.00	217.00	160.50	Clear	
5	21/22-04-08	-	104.00	136.00	136.00	120.00	-	259.00	270.00	270.00	264.50	Clear	
6	24/25-04-08	253.00	169.00	237.00	253.00	219.66	321.00	242.00	307.00	321.00	290.00	Clear	
7	29/30-04-08	-	105.00	202.00	202.00	153.50	-	142.00	238.00	238.00	190.00	Clear	
8													
9													
10													

* Kindly fill in 'R' if station falls in Residential Area 'I' if station in Industrial Area 'S' if station falls in Sensitive area

* Kindly fill in Whether conditions as Clear / Cloudy / Rainy/ Cyclopedia/ Dust Storm/ Calm condition (one or more may be applicable)

Note : 1- Kindly indicate reason if monitoring is not carried out for 24 hrs in a day or less than 8 days in a month

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TABLE A : Ambient Air Quality Data for SO2 and NOx Monitoring by : Jharkhand State Pollution Control Board

Sampling Location Address : MADA, Jharua

City : Dhanbad

State : Jharkhand

Station Code : 332

Station Type : I

Month: April

Year : 2008

Parameter	Units
SO2	ug/M ³
NOx	ug/M ³

S. No	Hrs. Date	SO2								NOx								Weather Conditions	Remarks
		06-10	10-14	14-18	18-22	22-02	02-06	4 Hrs Max	24 Hrs-Avg	06-10	10-14	14-18	18-22	22-02	02-06	4 Hrs. Max	24 Hrs. Avg		
1	4/5-04-08	13.60	16.04	17.43	15.80	13.07	15.25	17.43	15.19	27.61	46.98	40.63	37.69	30.75	35.71	46.98	36.56	Clear	Work was
2	9/10-04-08	11.50	12.55	20.22	20.92	14.64	18.13	20.92	16.32	30.47	33.33	36.82	41.90	36.19	53.33	53.33	38.67	Clear	not Completed
3	24/25-04-08	-	-	-	-	26.15	16.34	26.15	21.24	-	-	-	-	64.76	37.76	64.76	51.26	Clear	Due to Machine
4																			Break down
5																			
6																			
7																			

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* Kindly fill in Whether conditions as Clear / Cloudy / Rainy/ Cyclone/ Dust Storm/ Calm condition (one or more may be applicable)

Note : 1- Kindly indicate reason if monitoring is not carried out for 24 hrs in a day or less than 8 days in a month

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TABLE B : Ambient Air Quality Data for RSPM and SPM Monitoring by : Jharkhand State Pollution Control Board

Sampling Location Address : MADA, Jharia

City : Dhanbad

State : Jharkhand

Station Code : 332

Station Type : I

Month : April

Year : 2008

Parameter	Units
SO ₂	ug/m ³
NO _x	ug/ m ³

S. No	Hrs. Date	RSPM					SPM					Weather Conditions	Remarks
		06-14	14-22	22-06	8 Hrs Max	24 Hrs Avg	06-14	14-22	22-06	8Hrs. Avg	24 Hrs. Avg		
1	4/5-04-08	105.00	117.00	118.00	118.00	113.33	142.00	170.00	169.00	170.00	160.33	Clear	Work not Completed
2	9/10-04-08	105.00	87.00	118.00	118.00	103.33	239.00	208.00	211.00	239.00	219.33	Clear	Due to Machine
3	24/25-04-08	-	-	108.00	108.00	108.00	-	-	187.00	187.00	187.00	Clear	Break down
4													
5													
6													
7													

* Kindly fill in 'R' if station falls in Residential Area 'I' if station in Industrial Area 'S' if station falls in Sensitive area

* Kindly fill in Whether conditions as Clear / Cloudy / Rainy/ Cyclicone/ Dust Storm/ Calm condition (one or more may be applicable)

Note : 1- Kindly indicate reason if monitoring is not carried out for 24 hrs in a day or less than 8 days in a month

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TABLE A : Ambient Air Quality Data for SO₂ and NO_x Monitoring by : Jharkhand State Pollution Control Board

Sampling Location Address : PDIL , Sindri

City : Dhanbad

State : Jharkhand

Station Code : 46

Station Type : R

Month: April

Year : 2008

Parameter	Units
SO ₂	ug/M ³
NO _x	ug/M ³

S. No	Hrs.	SO ₂								NO _x								Weather Conditions	Remarks
	Date	06-10	10-14	14-18	18-22	22-02	02-06	4 Hrs Max	24 Hrs-Avg	06-10	10-14	14-18	18-22	22-02	02-06	4 Hrs. Max	24 Hrs. Avg		
1	4/5-04-08	16.73	20.92	22.31	20.14	18.52	18.30	22.31	19.48	43.17	45.71	46.98	42.78	39.68	39.99	46.98	43.05	Clear	
2	9/10-04-08	14.64	12.53	16.73	14.71	14.16	17.31	17.31	15.01	40.63	33.73	39.36	36.70	32.73	42.40	40.63	56.54	Clear	
3	11/12-04-08	-	19.52	18.83	17.26	18.30	16.34	19.52	18.05	-	43.17	31.74	33.33	39.99	44.64	44.64	38.57	Clear	
4	15/16-04-08	12.55	14.16	20.22	17.78	18.30	19.61	20.22	17.10	26.66	31.74	41.90	36.19	37.94	41.66	41.90	36.01	Clear	
5	17/18-04-08	25.75	18.35	34.56	14.71	14.16	15.80	34.56	18.88	29.76	44.11	89.44	36.70	31.74	34.72	89.44	44.41	Clear	
6	21/22-04-08	16.73	14.64	14.71	-	-	-	16.73	15.36	41.90	36.82	37.69	-	-	-	41.90	38.80	Clear	
7	24/25-04-08	27.07	13.94	21.99	27.17	23.87	23.07	27.17	22.85	60.52	33.01	48.38	65.97	51.50	49.24	65.97	51.43	Clear	
8	29/30-04-08	-	-	-	16.73	16.73	27.20	27.20	20.22	-	-	--	47.61	40.63	66.66	66.66	51.63	Clear	

* Kindly fill in 'R' if station falls in Residential Area 'I' if station in Industrial Area 'S' if station falls in Sensitive area

* Kindly fill in Whether conditions as Clear / Cloudy / Rainy/ Cystone/ Dust Storm/ Calm condition (one or more may be applicable)

Note : 1- Kindly indicate reason if monitoring is not carried out for 24 hrs in a day or less than 8 days in a month

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TABLE B : Ambient Air Quality Data for RSPM and SPM Monitoring by : Jharkhand State Pollution Control Board

Sampling Location Address : PDIL , Sindri

City : Dhanbad

State : Jharkhand

Station Code : 46

Station Type : R

Month: April

Year : 2008

Parameter	Units
SO ₂	ug/m ³
NO _x	ug/ m ³

S. No	Hrs. Date	RSPM					SPM					Weather Conditions	Remarks
		06-14	14-22	22-06	8 Hrs Max	24 Hrs- Avg	06-14	14-22	22-06	8Hrs. Avg	24 Hrs. Avg		
1	4/5-04-08	54.00	44.00	97.00	97.00	65.00	92.00	85.00	145.00	145.00	107.33	Clear	
2	9/10-04-08	68.00	39.00	164.00	164.00	90.33	129.00	92.00	243.00	243.00	154.66	Clear	
3	11/12-04-08	63.00	92.00	97.00	97.00	84.00	208.00	129.00	161.00	208.00	166.00	Clear	
4	15/16-04-08	79.00	69.00	122.00	122.00	139.33	133.00	102.00	188.00	188.00	141.00	Clear	
5	17/18-04-08	90.00	99.00	111.00	111.00	100.00	168.00	188.00	207.00	207.00	187.66	Clear	
6	21/22-04-08	209.00	170.00	-	209.00	189.50	313.00	274.00	-	274.00	293.50	Clear	
7	24/25-04-08	109.00	148.00	168.00	168.00	141.66	183.00	239.00	259.00	259.00	227.00	Clear	
8	29/30-04-08	-	109.00	167.00	167.00	138.00	-	200.00	256.00	256.00	228.00	Clear	

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