

### 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	May	2008	Meteorological Data SO <sub>2</sub> , NO <sub>x</sub> , RSPM, SPM	
2	MADA, Jharia	I	332	May	2008	SO <sub>2</sub> , NO <sub>x</sub> , RSPM, SPM	
3	PDIL, Sindi	R	46	May	2008	SO <sub>2</sub> , NO <sub>x</sub> , 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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R.O. Dhanbad

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

Name of City : Dhanbad  
 Name of State : Jharkhand

S. No	Sampling Location Address	Station Type	Station Code	Month and Year	SO2				.				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	May 2008	39	19.27	4.43	52.30	39.	42.76	9.22	108.09	20	130.33	109.08	74.01	253.00	20	173.71	152.70	82.09	308.00
2	MADA Jharia	I	332	May 2008	10	30.23	3.72	41.84	10	65.62	3.03	91.42	5	132.08	129.96	33.35	183.00	5	218.25	125.78	46.32	280.00
3	PDIL Sindri	R	46	May 2008	42	16.37	4.25	46.88	42	39.92	7.59	100.57	21	87.80	85.74	20.35	146.00	21	160.85	160.05	17.23	227.00

\* 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 = Arithmatic mean in ug/m<sup>3</sup>  
 S.D = Standard Deviation  
 Max = Max value (24 hours average in ug/m<sup>3</sup>)  
 G.M = Geometric Mean in ug/m<sup>3</sup>

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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 : May  
Year : 2008

S. NO	Hrs	06-10				10-14				14.18				18.22				22.02				06.02				Weather	Cibdntub	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						W.D.				
1	5/6-05-08	29.00	85.50	1.000	NNE	39.50	68.50	0.925	NNW	36.750	40.00	5.850	EEN	31.750	41.52	6.250	EEN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Clear	22	41	
2	8/9-05-08	25.50	77.50	1.325	EEN	30.50	60.50	1.825	EEN	32.50	53.75	2.075	EEN	29.50	64.50	1.650	EEN	26.50	70.25	1.525	EEN	23.50	78.50	2.575	EEN	Clear	22	33							
3	12/13-05-08	31.00	84.25	1.525	NNE	37.500	80.75	3.700	EEN	36.25	61.50	0.975	EEN	32.500	61.50	1.025	EEN	28.87	67.00	0.500	SSE	27.250	74.25	0.475	SSE	Clear	27	39							
4	15/16-05-08	31.250	84.25	1.025	NNE	37.75	87.00	2.275	NNE	-	-	-	-	-	-	-	-	34.250	69.000	1.075	NNE	30.500	76.000	0.775	NNE	Clear	28	39							
5	21/22-05-08	32.25	52.75	2.675	NNE	38.000	52.50	2.000	NNE	37.75	57.25	1.775	NNE	34.50	57.25	1.150	NNE	30.50	68.00	0.825	EEN	26.500	80.50	0.950	EEN	Clear	25	39							
6	23/24-05-08	31.000	52.25	2.075	NNE	37.25	50.75	2.125	NNE	36.250	54.00	1.775	EEN	34.00	60.50	1.875	NNE	30.750	69.75	1.425	NNE	27.50	74.50	1.900	NNE	Clear	26	39							
7	26/27-05-08	30.500	62.75	0.925	WWN	33.50	55.75	0.425	WWN	35.32	54.75	0.575	WWN	32.75	57.75	0.750	WWN	30.75	61.25	1.000	EEN	28.00	75.00	1.0750	EEN	Clear	27	36							
8	29/30-05-08	37.750	49.75	0.325	WWN	42.750	43.00	1.475	WWN	42.000	44.00	0.525	WWN	39.50	43.00	0.375	WWN	37.250	44.25	0.375	WWN	33.500	43.50	0.650	WWN	Clear	32	43							

\* 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  
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 SO<sub>2</sub> and NO<sub>x</sub> Monitoring by : Jharkhand State Pollution Control Board**

Sampling Location Address : Regione Office Dhanbad

City : Dhanbad

State : Jharkhand

Station Code : 44

Station Type : R

Month: May

Year : 2008

Parameter	Units
SO <sub>2</sub>	ug/M <sup>3</sup>
NO <sub>x</sub>	ug/ m <sup>3</sup>

S. No	Hrs. Date	SO <sub>2</sub>								NO <sub>x</sub>								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	5/6-05-08	17.43	20.22	20.92	17.43	18.30	17.26	20.92	18.59	44.44	38.09	50.79	44.44	34.28	36.19	50.79	41.37	Clear	
2	8/9-05-08	52.30	27.2	29.29	20.22	16.21	19.17	52.30	27.39	108.09	60.95	64.76	45.71	33.33	39.15	108.09	58.66	Clear	
3	12/13-05-08	18.13	19.52	20.92	16.21	16.73	23.71	23.71	19.03	40.63	41.90	43.17	35.23	36.19	50.79	50.79	41.31	Clear	
4	15/16-05-08	13.07	13.60	17.26	14.64	13.07	15.69	17.26	14.55	38.09	34.28	28.57	23.80	31.42	27.11	38.09	30.54	Clear	
5	23/24-05-08	17.43	19.82	15.16	21.62	16.09	-	21.62	18.02	41.90	45.44	33.33	46.98	38.96	-	46.98	41.32	Clear	
6	26/27-05-08	-	-	20.92	17.43	19.32	31.38	31.38	22.31	-	-	57.14	41.90	33.33	68.57	68.57	50.23	Clear	
7	29/30-05-08	13.07	15.34	16.04	14.19	14.64	16.89	16.89	15.02	34.28	36.82	34.28	35.37	37.14	37.69	37.69	35.93	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 Control Board**

Sampling Location Address : Regione Office Dhanbad

City : Dhanbad

State : Jharkhand

Station Code : 44

Station Type : R

Month : May

Year : 2008

Parameter	Units
SO <sub>2</sub>	ug/m <sup>3</sup>
NO <sub>x</sub>	ug/ m <sup>3</sup>

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	5/6-05-08	33.00	19.00	41.00	41.00	31.00	52.00	30.00	58.00	58.00	46.66	Clear	
2	8/9-05-08	88.00	32.00	77.00	88.00	65.66	153.00	87.00	120.00	153.00	120.00	Clear	
3	12/13-05-08	125.00	84.00	166.00	166.00	125.00	185.00	128.00	208.00	208.00	173.66	Clear	
4	15/16-05-08	131.00	92.00	108.00	131.00	110.33	188.00	121.00	198.00	198.00	169.00	Clear	
5	23/24-05-08	203.00	242.00	225.00	242.00	223.33	236.00	282.00	281.00	282.00	266.33	Clear	
6	26/27-05-08	-	105.00	151.00	151.00	128.00	-	130.00	180.00	180.00	155.00	Clear	
7	29/30-05-08	253.00	224.00	210.00	253.00	229.00	308.00	277.00	271.00	308.00	285.33	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 SO<sub>2</sub> and NO<sub>x</sub> Monitoring by : Jharkhand State Pollution Control Board**

Sampling Location Address : MADA, Jharua

City : Dhanbad

State : Jharkhand

Station Code : 332

Station Type : I

Month: May

Year : 2008

Parameter	Units
SO <sub>2</sub>	ug/M <sup>3</sup>
NO <sub>x</sub>	ug/M <sup>3</sup>

S. No	Hrs. Date	SO <sub>2</sub>								NO <sub>x</sub>								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	15/16-05-08	-	-	33.47	41.84	19.52	36.61	41.84	32.86	-	-	76.19	66.66	48.25	79.99	79.99	67.77	Clear	Work hampered
2	29/30-05-08	24.41	26.50	25.10	34.52	27.89	27.20	34.52	27.60	53.33	57.14	58.41	91.42	57.14	63.49	91.42	63.48	Clear	not Completed
3																			Due to Machine
4																			Break down
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/ 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 : May

Year : 2008

Parameter	Units
SO <sub>2</sub>	ug/m <sup>3</sup>
NO <sub>x</sub>	ug/ m <sup>3</sup>

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	15/16-05-08	-	92.00	125.00	125.00	103.50	-	173.00	198.00	198.00	185.50	Clear	
2	29/30-05-08	146.00	138.00	183.00	183.00	155.66	226.00	247.00	280.00	280.00	251.00	Clear	
3													
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/ Cyclic/ 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 SO<sub>2</sub> and NO<sub>x</sub> Monitoring by : Jharkhand State Pollution Control Board**

Sampling Location Address : PDIL , Sindri

City : Dhanbad

State : Jharkhand

Station Code : 46

Station Type : R

Month: May

Year : 2008

Parameter	Units
SO <sub>2</sub>	ug/M <sup>3</sup>
NO <sub>x</sub>	ug/M <sup>3</sup>

S. No	Hrs. Date	SO <sub>2</sub>								NO <sub>x</sub>								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	5/6-05-08	10.98	12.74	12.55	11.98	12.03	13.07	13.07	12.22	37.14	42.73	52.50	43.80	44.76	41.90	52.50	43.80	Clear	
2	8/9-05-08	13.25	12.55	16.04	15.34	13.07	15.80	16.04	14.34	40.63	41.90	44.44	40.63	35.71	38.69	44.44	40.33	Clear	
3	12/13-05-08	16.73	19.52	20.92	17.43	23.01	15.80	23.01	18.90	36.82	44.44	35.55	31.74	33.01	34.72	44.44	36.04	Clear	
4	15/16-05-08	20.92	15.50	15.34	16.04	12.55	11.44	20.92	15.29	60.95	44.36	44.44	45.71	36.19	36.70	60.95	44.72	Clear	
5	23/24-05-08	46.86	21.62	23.01	24.41	17.43	15.80	46.86	24.85	100.57	44.44	49.52	46.98	33.73	35.71	100.57	51.82	Clear	
6	26/27-05-08	10.35	16.04	14.64	18.13	11.98	18.89	18.89	15.00	20.83	35.55	31.74	40.63	25.79	42.99	42.99	32.92	Clear	
7	29/30-05-08	9.41	11.98	11.44	25.28	12.03	14.12	25.28	14.04	20.95	26.78	25.76	49.20	23.80	32.38	49.20	29.81	Clear	
8																			

\* 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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R.O. Dhanbad

**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: May

Year : 2008

Parameter	Units
SO <sub>2</sub>	ug/m <sup>3</sup>
NO <sub>x</sub>	ug/ m <sup>3</sup>

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	5/6-05-08	101.00	114.00	115.00	115.00	110.00	168.00	163.00	185.00	185.00	172.00	Clear	
2	8/9-05-08	63.00	58.00	61.00	63.00	60.66	143.00	126.00	131.00	143.00	133.33	Clear	
3	12/13-05-08	36.00	45.00	146.00	146.00	75.66	111.00	118.00	227.00	227.00	152.00	Clear	
4	15/16-05-08	59.00	80.00	74.00	80.00	71.00	167.00	146.00	144.00	167.00	152.33	Clear	
5	23/24-05-08	128.00	82.00	122.00	128.00	110.00	220.00	151.00	181.00	220.00	184.00	Clear	
6	26/27-05-08	100.00	69.00	117.00	117.00	104.33	168.00	166.00	192.00	192.00	175.00	Clear	
7	29/30-05-08	96.00	101.00	50.00	101.00	82.33	170.00	168.00	134.00	170.00	157.33	Clear	
8													

\* 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 : 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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