# REPORT ON ENVIRONMENTAL STATUS OF AMRAVATI REGION MAHARASHTRA



# MAHARASHTRA POLLUTION CONTROL BOARD

Kalpataru Point, Sion Circle, Sion (East) Mumbai 400 022

## REPORT OF

#### **ENVIRONMENTAL STATUS OF AMRAVATI REGION**

#### **1. INTRODUCTION**:-

Amravati known as Indrapuri the Capital of Lord Indra is famous for it's ancient culture. The Region comprises of five district namely Amravati, Akola, Yavatmal, Buldana and Washim districts. Tiger project at Chikhaldara is about 75 Km. from Amravati. Chikhaldara the place where Pandawa's were in one year state of exile. The famous Lonar Crater is shown separately. Jain temples at Muktagiri is near Paratwada. The Maharashtra Pollution Control Board which was established in the year 1970 is primarily responsible for the Air & Water pollution control activities, creating environmental awareness among the masses and implementing various Environmental legislations. The umbrella Environment Protection Act, 1986 and various rules made thereunder like:-

- ❖ Hazardous Waste (Management & Handling) Rules, 1989
- ❖ Bio-Medical Waste (Management & Handling) Rules, 1998
- Municipal Solid Waste (Management & Handling) Rules,
   2000
- ❖ Recycled Plastics Manufacture and Usage Rules, 1999 and Recycled Plastics Manufacture and Usage (Amendment) Rules, 2003
- ❖ Fly Ash Utilization notification dtd. 14/09/1999 and its amendment dtd. 27/08/2003
- ❖ The Noise Pollution (Regulation and Control) Rules, 2000 are enacted and implemented.

Board has taken several steps for informative public awareness including upto date website, advertisement in News Papers, T. V. media, special programmes like celebration of World Environment Day on 5<sup>th</sup> June, the World

Ozone Day on 16<sup>th</sup> September etc. The Board has also decided that the Environment status report for each region is made available to the public. The Environment status report of Amravati Region is prepared with this background.

#### **2. BACKGROUND**:-

Initially this Region was attached to Regional Office, Nagpur. At that time only Sub Regional Office, Akola was functioning. Amravati Region was established in 1997 at Amravati. There are three sub-divisions viz. 1) Amravati-I (Amravati District), 2) Amravati – II (Yavatmal & Washim Districts), 3) Akola (Akola & Buldana Districts) under jurisdiction of Regional Office, Amravati. This Region is located in Purna Sub Basin, Painganga Basin and Wardha Basin. The important rivers in this region are Wardha, Painganga, Man, Shahanoor, Katepurna, Chandrabhaga, Bembla & Nalganga etc. The region is blessed with abundant natural resources in the form of rivers, high mountain ranges. Wani taluka in Yavatmal district has prominently Coal Mines & Lime Quarries and other part of the region covered the industries like engineering, Agro based units. There is only one thermal power station viz. Paras Thermal Power Station, MSEB, Paras, Tq. Balapur, Dist. Akola having generation capacity 62.5 MW.

#### 3. INVENTORY OF POLLUTION SOURCES:-

With the expansion of MPCB activities with the newer environmental regulations, MPCB is entrusted to control pollution and environmental issues and therefore, MPCB is required to regulate industries, hospitals, Fly ash generation and Municipal Solid Waste generation. As per record, there are about 3828 industries in Amravati region. The important industries in the area are located at Akola, Yavatmal, Amravati, Khamgaon & Malkapur (Buldana District). The details of industries in the region are presented in Table - 1. The

details for Municipal Solid Waste, Fly ash generation and its disposal, hospitals etc. is separately presented in respective sections.

<u>Table – 1</u> Industry Statistics of Amravati Region

District	Category	LSI	MSI	SSI	TOTAL
AMRAVATI	RED	06	04	68	78
	ORANGE	03	00	313	316
	GREEN	00		744	744
YAVATMAL	RED	26	07	87	120
	ORANGE	02	Nil	379	381
	GREEN	Nil	Nil	135	135
WASHIM	RED	Nil	03	18	21
	ORANGE	Nil	Nil	258	258
	GREEN	Nil	Nil	89	89
AKOLA	RED	07	12	25	44
	ORANGE		01	424	425
	GREEN	01	Nil	607	608
BULDANA	RED	05	07	40	52
	ORANGE	Nil	06	291	297
	GREEN	Nil	Nil	364	364
Total		48	37	3643	3828

#### **4. WATER ENVIRONMENT** :-

Amravati Region is blessed with vast natural water resources in the form of perennial river which are major source of drinking water supply to various cities. The important occupations in this region is agriculture, which are highly dependent on these important water resources. The indutriliazation and

the increasing urbanization are responsible for the rapidly increasingly stress on the water environment of the area. It is therefore necessary to protect these water resources of the region.

#### 4.1 Surface Water:-

The important rivers flowing through the region are Wardha, Painganga, Purna, Katepurna, Man, Shahanoor, Chandrabhaga, Bembla & Nalganga etc. These rivers are important drinking water resources of the region. MPC Board regularly monitors the water quality at these important water resources and the water quality is generally meeting the standards. Specified by the best uses in the particular stretches. The average water quality of these rivers is presented in Table -2.

The Amba nala passes through the dense, residential & commercial area of Amravati city, River Morna passes through the Akola city. It is observed that these rivers are encroached by the residential growth from all sides & experiencing pollution due to addition of domestic sewage. Further, their natural water streams are also obstructed due to human activities resulting in drying of these rivers.

MPCB monitored the water quality at some lakes before & after Ganpati Festival. Table-3 presents the water quality at some lakes before & after Ganpati immersion. The change in water quality illustrates the need of educating the people regarding water pollution due to immersions.

#### 4.2 Ground Water :-

MPCB has monitored some wells periodically. The ground water quality observed at some location in Amravati & Akola city is presented in Table-4. Total hardness (CaCO3) and Sulphates is sometimes beyond the limit.

#### 4.3 Gems & MINARS sampling station :-

There is one Minimal Indian Nation Aquatic Resource Sampling (MINARS) station at Purna river in the Amravati Region. This is located at Dhupeshwar, Tq: Malkapur, Dist: Buldana. Quarterly samples are collected & analysed at Regional

Laboratory at Nagpur. The results shown in Table-5 as below. Water quality is mostly within limits except sulphates on few occasions.

#### 5. Air Quality Monitoring :-

Amravati Region accommodate highly populated urban areas like Amravati, Yavatmal & Akola cities. The problem of air pollution is felt in some specific areas within the cities mainly due to heavy traffic density. MPCB monitors ambient air quality at several locations including the industries & urban areas. The proposal for operating NAQAAM stations has been submitted and work of finalization of monitoring at Rajkamal Chowk, Camp Area and MIDC Area is going on. The data of ambient air quality of Amravati ,Yavatmal, Wani & Akola city is presented at Table-6.It shows that the ambient air quality is generally within the standards. Wani area is showing predominant deviation.

There are maximum small scale industries like oil mills, dal mills, cottage industries producing handloom cloth, rope making, ginning & pressing industries, spinning mills etc. located in all the districts of Amravati Region. There is Thermal Power Station of 62.5 MW at Paras in Balapur Taluka of Akola District Here electricity is generated with the help of coal. MPCB regularly monitors the air emission at Thermal Power Station.

Board has also monitored the noise levels during the Diwali Festival which are presented in the Table-7. This indicate the need of creating awareness about the noise pollution due to fire crackers.

#### 6. Hazardous Waste Management :-

Amravati Region accommodates large number of industries falls under green & orange categories & few polluting industries under red categories & as such the hazardous waste generation in the region is not significant. As per the preliminary inventory based on 2003 amendment in the Rules there are about 81 hazardous waste generation units. Details are given in Table-8.

### 6.1 Treatment & Disposal of Hazardous Waste:-

As per the 2003 amendment there are about 81 Hazardous Waste generating industries of which 13 industries have been observed as closed & presently 06 industries have become Member of Common Hazardous Waste Treatment & Disposal Facilities (CHWTDF). The details of the CHWTDF membership are presented in Table-9.

# **6.2 Hazardous Waste Reprocessing Units:**

Amravati Region accommodates industry engaged in reprocessing of hazardous waste such as waste/used oil. The details of this unit is presented in following Table-10.

#### 7. Bio-Medical Waste Management :-

The Bio-Medical Waste (M&H) Rules have been promulgated in 1998. As per the record available with MPCB there are about 808. Health Care Facilities in Amravati Region with about 11200 beds generating about 2237 kg/day of Bio-Medical Waste per day.

The Bio-Medical Waste generation is estimated based on the Bio-Medical Waste generation rate of 0.125 k.g./day per bed as per the estimates given by the common facility operators. However, the actual Bio-Medical Waste generation will definitely vary depending on the type of hospital, level of automation at hospital & also occupancy rate of hospital. Considering about 80% occupancy the Bio-Medical Waste generation is expected to be about 53688 kg/M. Details as per table 11 & 12.

There is one existing Common Bio-Medical Waste Treatment & Disposal Facility, M/s Global Eco Save Systems, in Amrvati Region which is located at Durgapur Road, Bandar, Dist: Amravati. The civil work of another facility M/s. Intigra Bio-Medical Waste Management Systems, which is to be located at Sarav, Tq: Barsitakli, Dist: Akola is in progress. The facility at Badnera has started its operation since May - 2003 this facility has an incinerator of 100 Kg/Hr. capacity & autoclave facility. The facility started collecting Bio-Medical Waste from

Amravati Municipal Corporation Area, Yavatmal City & few hospitals form Akola city for treatment &disposal. The present performance of facility at Badnera is presented in Table-13.

It is noted from the above that about 74 % of the Bio-Medical Waste generated in beded hospitals in the region is presently reaching the common facilities for treatment & disposal. Further Govt. hospitals from Akola city are disposing their waste with the help of common bio-medical waste facility at Badnera, Dist: Amravati.. MPCB has taken initiative to further insure that all remaining health care institutes mainly dispensaries & out door facilities dispose their Bio-Medical Waste in compliance with the rules. The hospitals form the towns (Taluka places) in all the five districts of this region do not have proper arrangements of Bio-Medical Waste disposal & efforts are being taken to ensure the compliance of the rules soon in these areas also. The construction work of common treatment and disposal facility at Akola of M/s. Intetra Bio-Medical Waste Management Systems, 1<sup>st</sup> floor, Patil Complex, Opp. Khandelwal Bhawan, Alsi Plot, Akola. Till such time they are suppose to utilize the services of M/s. Global Eco Save Systems at. Bednera.

#### 8. Municipal Solid Waste Management :-

There are two Municipal Corporations (Amravati & Akola) & 38 Municipal Councils in the region. Most of these towns have experienced significant population growth in last two decades. Presently in all the urban bodies in the region. For the treatment & disposal of Municipal Solid Waste generated in the cities & towns selection of proper sites have been finalised.

Presently in all the urban bodies in the region the entire Municipal Solid Waste is disposed improperly except Akola Municipal Corporation having a waste processing facility of M/s. Bhudhan Organic Manures Ltd, Located at Amanatpur run by a private agency. The status of Municipal Solid Waste management is presented in Table-14.

It is observed from the information that the total Municipal Solid Waste generation in the region is about 692.11 T/Day. The all the municipal councils in

Amravati region & Amravati Municipal Corporation has obtained authorisation. The application for authorisation of Akola Municipal Corporation is under consideration of HQ, Mumbai.

#### 9. Fly Ash Utilisation :-

It is mandatory for the brick manufacturers located within 100 k.m. from the coal based thermal power plants utilised minimum 25% of fly ash in manufactruing of the bricks. It is also mandatory for the construction agencies to utilisd the fly ash & fly ash based products in a time bound manner. The fly ash utilisation rules have been framed in order to protect the precious top layer soil used in brick manufacturing which is causing environmental degradation of soil besides other impacts such as greater soil erosion, loss of green cover etc. & also encourage the utilisation of fly ash which is accumulating a very high rate. The Akola, Buldana, & part of Amravati district is covered under 100 k.m. from coal based thermal power station located at Paras, Tq: Balapur, Dist: Akola having 62.5 MW electricity generation capacity. This thermal power station is generating in an average nearly 8000 Tons of fly ash every month. The fly ash is stored in the ash bund. Board has perused for utilisation of fly ash with the power station regularly.

There are three existing units in operation utilising fly ash for fly ash brick manufacturing & about 400 Brick kilns located in the 100 k.m. radius from the thermal power station utilising fly ash. The fly ash utilisation from the Paras Thermal Power Station over a period is presented in Table-16 which indicates steady increase in the utilisation.

#### 10. Environmental Awareness Activities :-

Environmental awareness is one of the important functions of the Board. regional Office Amravati is actively involved in environmental awareness activities. MPCB has organized a special programme to Commemorate World Environmental Day 5<sup>th</sup>/June-2005 At Amravati.

Table – 2 River Water Quality data (2004-05)

Name of the River / Lake	Name of sampling Station	Class of Water	No. of Samples analysed in report year							Water	· Quali	ty Statu:	5					
				рН	_		(	COD m	g/l		BOD n	ng/l		DO mg	/1		al Colif	
Dist. Amravati.				Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Pedhi river	Kund	AII	05	7.25	8.56	7.93	14	72	43	3.1	07	5.05	05	6.15	5.58			
Pedhi river	Haturna	AII	05	7.63	8.69	7.98	16	71	43.5	3.5	8.5	06	4.99	6.12	5.55			
Pedhi river	Bhatkuli	AII	05	7.35	8.24	7.99	24	81	52.5	3.6	8.8	6.2	4.83	6.1	5.46			
Pedhi river	Dadhi Pedhi	AII	05	7.39	8.65	8.02	18	68	43	03	9.6	6.3	04	6.17	5.08			
Purna river	Vishroli	AII	02	7.49	8.53	8.01	16	27	21.5	2.9	3.1	2.5	5.79	6.02	5.9			
Purna river	Kural	AII	02	7.97	8.57	8.27	30	51	40.5	3.2	4.5	3.85	5.6	6.06	5.83			
Purna river	Ashegaon	AII	02	7.9		7.9	34		34	04		04	04		04			

Contd.

Purna river	Kholapur	AII	02	7.88	8.52	8.2	20	81	50.5	3.3	9.2	6.25	5.61	5.64	5.62	 	
Purna river	Lasur	AII	02	7.87	8.47	8.17	20	62	41	3.1	07	5.05	5.61	6.69	5.65	 	
Amba nalla	Amravati.	AII	02	08	8.55	8.27	264	328	251	114	156	135				 	
Dist. Yavatmal.																	
Penganga river	Belkhed	AII	04	8.27	8.43	8.35	28	96	62	3.2	14	8.6	4.86	5.97	5.415	 	
Penganga river	Umarkhed	AII	04	7.95	8.46	8.20	24	80	52	3.0	10	6.5	5.05	5.99	5.525	 	
Penganga river	Esapur	AII	02	8.32	8.32	8.32	18	18	18	3.4	3.4	3.4	5.4	5.4	5.4	 	
Penganga river	Wada.	AII	02	8.23	8.43	8.33	25	64	44.5	3.1	8.2	5.515	5.14	5.15	5.15	 	
Dist. Akola																	
Morna River	Akola	AII	06	7.70	8.97	8.30	16	128	42.66	2.8	25.6	7.06	4.06	6.31	5.45	 	
Purna River	Andura	AII	07	7.70	8.69	8.4	12	20	17.14	2.9	3.6	3.14	5.15	6.32	6.02	 	
Purna River	Gandhigra m	AII	07	2.65	8.85	8.44	16	24	18.28	2.9	4.0	3.28	5.37	6.21	5.98	 	
Purna River	Lakhpuri	AII	02	7.79	8.45	8.12	20	100	60.0	3.3	10.0	6.65	5.19	5.45	5.32	 	
Man River	Paras	AII	07	7.97	8.45	8.43	16	100	35.42	2.9	10.0	4.5	4.7	6.19	5.50	 	
Katepurna River	Kuran- khed	AII	02	8.16	8.70	8.43	16	24	20.0	3.0	3.8	3.4	6.23	2.24	6.23	 	
Dist. Buldana																	
Purna River	Zadegaon	AII		7.88	8.52	8.2	20	81	50.5	3.3	9.2	6.25	5.61	5.64	5.62	 	

Purna River	Dhupe- shwar	AII		7.87	8.47	8.17	20	62	41	3.1	07	5.05	5.61	6.69	5.65	 	
Painganga River	Mehkar	AII	02	08	8.55	8.27	264	328	251	114	156	135				 	

Table-3 Water Quality Before and After Ganpati Festival.

Location		СН	IATRI TAL	AO	PEDHI AT REWASA	PURNA A	T ASEGAON
Month		Before Emersion	After Emersion	After Emersion	Before Emersion	After Emersion	After Emersion
Date of Sampling		26/09/04	28/09/04	29/09/04	27/09/04	28/09/04	28/09/04
Parameters	MPCB Limits (mg/ltrs)						
pН	5.5 to 9	8.32	8.49	8.46	8.5	8.59	8.55
Conductivity							
DO	4	6.06	4.94	4.48	5.93	6.03	
BOD	5	8	8.6	12.5	3.5	3	5.6
COD	250	50	50	82	45	32	57
SS	100	34	46	58	26	28	54
TDS	2100	512	610	696	498	536	636
ONG	10	Nil	Nil	Nil	Nil	Nil	Nil
CD	0.01	BDL	BDL	BDL	BDL	BDL	BDL
Pb	0.1	0.021	0.055	0.068	0.053	0.057	0.09
HG	0.001	BDL	BDL	BDL	BDL	BDL	BDL
Chlorides	600	100	60	60	80	75	65
Sulphates	400						
Ni	45	12.5	12	27.9	27.9	27.9	
Phosphate		0.058	0.12	0.11	0.078	0.096	0.13
% of Sodium	60	61.32	41.2	38.3	57.7	55	23.89
Cr	0.05	BDL	BDL	0.004	0.021	0.01	0.004

Table – 4 Ground Water Quality

Name of the location	No. of		1			2			3			4			5			6	
	Samples analysed in reporting year		pН			al hard CaCO		(	Chlorid	les		DO		NIT	RATE	(NO3)	SUI	<b>LPHATE</b>	(SO4)
		Min	Max	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max	Avg.
Landfill site Amravati.	2	7.49	8.63	8.05	424	658	541	80	460	270									
Mahendra Colony, Amravati.	2	7.49	8.29	7.89	442	486	464	129	155	142	6.15								
Landfill site of Yavatmal.	1							Re	sult aw	aited									
Sample of borewell at	2	8.42	8.83	8.62	294	348	321	201	280	240.5	5.62	5.96	5.79	9.8	10.9	10.35	58	77.78	67.89
Shri Sonone's residence, Akola																			
Bore water sample at S. R. O.	2	8.25	8.47	8.36	508	590	549	200	240	220	5.92	5.97	5.94	6.9	12.2	9.55	184	442.87	313.43
Akola.																			
Open well at Shri Saraf residence, Khamgaon.	1	7.75		7.75	504		504	136		136	5.6		5.6	7.8		7.8	64.7		64.7

Table – 5

# ANALYSIS RESULT PURNA RIVER POINT AT DHUPESHWAR YEAR 2004-05.

PARAMETER & LIMIT	Apr-04	Jul-04	Oct-04	Oct-04	Nov-04	Jan-05	Mar-05
				(MINARS)		(MINARS)	
ph	8.5	7.63	8.2	8.64	8.27	8.75	7.62
Turbidity	1	16	1		1		1
Conductivity	86	103	130	280	220	310	146
Dissolved Oxygen	5.5	5.93	6.15	6.3	5.9	6.2	5.1
B.O.D.	4	15	3.1	3.5	3	3.9	7.1
Chemical Oxygen Demand	20	72	18		20		24
Suspended Solids	18	84	14		18		20
T.D.Solids	436	510	658		1108		730
Calcium	33.6	28	36		44.8		28
Magnessium	12.6	11.6	10.69		34		36
Total Alkalinity	258	44	162		234		154
Hardness	136	118	118		252		134
Chloride	84	110	218		111		65
Sulphate	41	24.2	7		515		17
Ammonical Nitrogen	0.84	••••		1.23	••••	1.36	••••
Nitrate	4.5	16.8	6.6	3.61	11.6	4.28	4.8
Phosphate	0.28	0.111	0.194		0.103		0.136
Fecal Chlorifarm MPN/100 ml		••••		110		70	
Total Chlorifarm MPN/100 ml				900		500	••••

Table – 6 Ambient Air Quality Data ( 2004 – 05)

Name of the city	Name of sampling station	Class	Number of samples analysed in report year	So	O2(ug/m?	3)	Nox(ug	g/m3)			SPM(ug/m	3)	I	RSPM(ug/r	n3)
				Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Amravati	SriKrishna Peth	A	06	14.22	16.91	15.56	27.75	34	30.87	116	246	181	65.57	160	112.80
Yavatmal	1)Sneh nagar.	A	02		RESUL	TS AWA	AITED								
Rajur	House terrace.	С	02	22.1	27.3	24.7	28.44	34.12	31.28	638.88	2858.14	1748.51	349.80	1868.29	1109.045
Bahalar. Wani.	Guest house.	С	03	9.74	9.74	9.74				366	366	366	263	263	263
Akola	SRO Akola	A	03	18.56	27.32	22.42	23.86	33.90	27.46	93.18	201.32	138.57			

Table - 7
Noise levels monitoring observations.

City	Location	Class ***		Monitoring Period		Noise	levels in o	dBA
			Date	time		Min	Max	Avg
Yavatmal	Datta Square	Commercial	12/11/04	6.00 pm	3	70	95	82.5
	Shneh Nagar	Commercial	11/11/04	7.00 pm	3	85	110	97.5
Akola	Dabki Road	Residencial	11/11/04	7.30 pm	5	53.7	55.2	54.5
	Jaihind Chowk	Commercial	11/11/04	7.30 pm	5	74.5	78.2	76.4
	Chhaya Hospital	Sensitive	11/11/04	7.30 pm	5	60.9	64.6	62.8
Amravati	District Women Hospital	Sensitive	12/11/04	7.45pm	3	56.64	62.8	59.6
			11/11/04	7.45pm	3	50	58.4	54.2
	Jaystambh Chowk	Commercial	12/11/04	8.30 pm	3	76.3	84	80.8
			11/11/04	8.30 pm	3	66.78	74	70.7
	Rukhamini Nagar	Residencial	12/11/04	9.30 pm	3	62.3	84.9	71.2
			11/11/04	9.30 pm	3	54.21	68.8	60.5

Note:- \*\*\* means industrial, commercial, residential & sensitive.

Table - 8 Hazardous waste ( M&H ) Rules , 1989 ( Amendment 2000).

Name of District	No. of units generating H. W.	No. of authorisatio n issued	Quantity of H.W. generated in T/M	Quantity of H.W. Treated / disposed.	No. of units having adequate treatment & disposal facilities.	Remarks.
Amravati	32	27	256.075	0.3	01	03 nos. unit closed
Yavatmal & Washim	11	10	31.05	20.6	Joined CHWSTDF at Mumbai 03 nos.	1) Out of 11 nos. 06 units are closed hence HW quantity not taken into account. 2) Out of 11 nos. 03 units joined to CHWSTDF
Akola	20	11	119.011	54.185	02	M/s. Maharashtra Insecticides Ltd. & M/s. Chintamani Insulating Oils joined with M/s. Thane Trans Creek Waste management Association and Mumbai Waste Management at Taloja Dist. Raigad respectively.
Buldana	18	12	64.46	30.96	02	M/s. Hindustan Lever Ltd. MIDC, Khamgaon and M/s. Vardhan Sintex, MIDC, Khamgaon joined with CHWSTDF at Taloja Dist. Raigad.
Grand Total	81	60	470.596	106.045	05	

Table - 9 **Status of Hazardous Waste** 

Sr. No.	Particular	SRO,	Akola	SRO Amt-I	SRO	Amt-II	Total	Remark
		Akola	Buldana	Amravati	Washim	Yavatmal		
01	No. of units	20	18	32	01	10	81	
02	Complying units	09	03	02		08	22	
03	Non-complying units	11	15	28		02	56*	
04	Closed units	02	05	04	01	01	13	
05	Closure notice issued by MPCB	01	01	02		01	05	
06	Compliance of closure notice issued by MPCB	01	01	02		01	05	
07	Haz. Waste generated quantity (T/Month)							
	1. Incineration	73.376	33.5	159.37		2.5	268.746	
	2. Land fill	16.45	24.3	90.055		12.6	143.405	
	3. Sale	32.965	10.035	6.35		8.74	58.09	
	4. Reuse.	4.4	1.45	0.3		4.2	10.35	
	5. CWTDF		4.16			3.01	7.17	
	Total.	127.191	73.445	256.075		31.05	487.761	
08	Industries running without Authorisation.	Nil	Nil	Nil	Nil	Nil	Nil	
09	Applied for Authorisation under HW Rules	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	
10	No. of industries joined to common waste	01	02			03	06	
	treatment & disposal facility.							
11	No. of industries provided display board.	14	12	23		04	53	
12	No. of industries mfg. plastic carry	07	02	18	Nil	01	28	
	bag/containers.							
13	No. of plastic ind. mfg. plastic carry	07	02	11	Nil	01	21	Show
	bag/containers those applied / obtained							Cause
	registration from MPCB.							issued to
								remaining
								7 no. of
								industries.
14	No. of industries processing/recycling lead acid batteries.	01	Nil	Nil	Nil	Nil	Nil	**

<sup>\*</sup> Permitted to store in the premises as no common facility is located within 100 kms.

\*\* The unit located at Shivani, Akola is not so far commissioned.

**Table-10** 20

Hazardous Waste RE-processing industry in Amravati Region.

Sr. No.	Name of Industry.	Raw Material
01	M/s. Chintamani Insulating Oil, MIDC, Akola.	Waste / Used Oil.

**Table - 11** 

-							Table										
Health Care Facilities (ICF) under Schedule-VI of the rules.	Total no. of HCF	Total no. of Beds	No. of CBWTF/ private	No. of HCF which are	No. of HCF having	No. of HCF applied	No. of HCF Granted				itment equ g CBWTF			Total quantity of BMW	Total quantity of BMW	No. of Healthcare Facilities	Total No. of Show Cause Notices issued to defaulter HCFs
VI of the fules.	псг		agencies	utilising CBWTF	treatment and	for Authori-	Authori- sation	Incin	erator	Auto- clave	Micro- vave	Hydro- clave	Shre- dder	generated (kg/day)	treated (kg/day)	violated	
					disposal facilities	sation		With APCD	With- out APCD							Medical Waste Rules	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A) Hospitals and nursing homes in town with population of 30 lakhs and above.					N. A.												
B) Hospitals and nursing homes in town with population below 30 lakhs.																	
a) with 500 beds and above					N. A.												
b) with 200 beds and above but less than 500 beds	07	2312	01	04	01	07	06	01		01			01	460	460		
c) with 50 beds and above but less than 200 beds	23	2168	01	03	13	22	14		01					433	303	05	05
d) with less than 50 beds	778	6720	01	198		523	436							1344	681	540	540
C) All others institutions generation bio-medical waste not included in A) and B) above																	
TOTAL	808	11200	03	205	14	552	456	01	01	01			01	2237	1444	445	445

CBWTF - Common Bio-medical Waste Treatment Facility

**Table - 12**Biomedical waste ( M&H ) Rules , 1998. (Amendment 2000) :-

Name of District	No.of Medical institutes identified	No. of authorisation issued	Quantity of BMW generated in T/M	Quantity of Waste treated & disposed T/M	No. of units having adequate treatment disposal facilities.	Remarks.
Amravati	263	145	24.45	11.04	133	
Yavatmal & Washim	196	81	4.914	7.72	52	52 nos. joined CBMWTDF 18 nos. partial facility
Akola	202	160	20.82	4.62	12	M/s. General Hospital Akola & District Womens Hospital, Akola and 10 other hospital from Akola Municipal Corporation area has joined with CBMWTDF at Badnera, Dist. Amravati.
Buldana	107	60	11.04	Nil	Nil	
Grand Total	768	446	31.86	23.38	197	

**Table - 13 Information on Common Bio-medical Waste Treatment Facility (CBWTF)** 

Sr. No	Name & Address of CBWTF with telephone no.	Name of cities/ areas covered by CBWTF	Total no. of HCFs being covered	Total no. of beds covered	Quantity of BMW treated Kg/day	Cost of treatment of BMW charged by the CBWTF operator (Rs./.kg or Rs./ Day)	Treatment Facilities installed at CBWTF (Incinerator/ Autoclave/ ETP, etc.)	Air Pollution Control device installed with incinerator	Method of Disposal of treated waste.
1	Office:- M/s. Global Eco Save Systems,118, First Floor, Shree Balaji Market Complex, Jawahar Road, Amravati. P. No0721- 2565493, Res 0721- 2673478  Site:- S. No. 238, Durgapur Road, Badnera, Amravati.	Amravati Corp. Yavatmal City. Akola District. (Part)	Hospital- 205, Clinic – 66, Path. Lab / Blood Bank – 36, Dental Clinic – 17	5 2950	490	Copy enclosed.	1) Double chambered Incinerator. 2) Autoclave. 3) Shredder . 4) ETP.	Ventury scrubber followed by chimney of 30 Met. height	1) Category 1, 3, 6 through incineration in incinerator having double chambered with automatic temp. recorder. 2) Category 4, 7 – by Autoclaving and shredding.

Note :- 1) Pacca Pit for collection of shredded material is provided.
2) Treated effluent is recycled for scrubbing system.

Table – 14

Municipal Solid Waste (M&H) Rules , 2000. :-

Name of District	No.of local bodies	No. of authori- sation issued	Quantity of MSW generated in T/M	Quarterly of waste treated and disposal	No. of local bodies having adequate treatment facility	Remarks.
Amravati.	11	11	7051.50	Nil	Nil	M/s Rasika Seeds Pvt. Ltd. has granted authorisation for treatment of Municipal Solid Waste of quantity 150 T/day
Yavatmal & Washim	12	11	4141.8	Nil	Nil	Sites for Solid Waste Treatment and Disposal selected and identified. Solid Waste disposal by dumping.
Akola	06	05	3720	1550 T/M	01	M/s. Bhudhan Organic Manuars Pvt. Ltd. has set up MSW processing plant at Amanatpur,
Buldana	11	11	5850	Nil	Nil	
Grand Total	40	38	20763.30	1550 T/M	01	

 $\label{eq:TABLE-15} TABLE-15$  Information regarding local bodies.

1	2	3	4	5	6	7	8	9	10	11	12	13
SN	Name of Local Body	Population	Source of Water	Consent under Water act. Validity.	Quantity of Water Consumption CMD	Quantity of Domestic Effluent CMD	Treatment Facility Provided whether Adequate/ Inadequate	Mode of disposal	Quantity of Solid Waste Generate T/Day	Treatment Facility for Solid Waste Generate	Disposal of Solid Waste Generated	Authorisation as per Municipal Solid Waste rules. Validity.
1	Municipal Corporation, Amravati.	650000	Upparwardha dam, Tube wells	31/07/2006	62000	49600	Inadequate	Local nala to Pedhi river	150	No	Land filling / dumping.	Obtained
2	Municipal Council, Achalpur	107304	Tube wells	31/12/2004	10000	8500	Inadequate	Bicchan & Sapan river	25	No	Dumping	Obtained
3	Municipal Council, Anjangaon Surji	51163	Shahanur dam	31/07/2004	2850	2280	Inadequate	Shahanur river	10	No	Dumping	Obtained
4	Municipal Council, Chandur Rly.	17720	Well & Malkhed Tank W.S.S.	31/12/02	3300	3234	Inadequate	Local nala/ river Chandra- bhaga	4.5	No	Dumping	Obtained
5	Municipal Council, Chikhaldara.	4700	Lakes	31/12/2005	500	400	Inadequate	Local nala to Sipna river	02	No	Dumping	Obtained

Contd.

6	Municipal Council, Chandur Bzr.	17635	Tube wells	31/12/2002	1400	800	Inadequate	Parsoda nala to Pedhi river	6.5	No	Dumping	Obtained
7	Municipal Council, Dhamangaon Rly.	20328	Well & Tube wells	31/12/2004	1980	1584	Inadequate	Local river Chandra- bhaga	05	No	Dumping	Obtained
8	Municipal Council, Daryapur	34398	Shahanur dam	31/12/2012	1950	5060	Inadequate	Local river Chandra- bhaga	06	No	Dumping	Obtained
9	Municipal Council, Shendurjana Ghat.	21080	Well & Tube wells	31/06/2012	1000	800	Inadequate	Local nala / river Deona- Jiona	04	No	Dumping	Obtained
10	Municipal Council, Warud.	41000	Shekdari dam	31/12/2011	1000	800	Inadequate	Local river Chudamani	16	No	Dumping	Obtained
11	Municipal Council, Morshi	33607	Upparwardha dam	31/12/2007	4110	3288	Inadequate	Local nala / river Damyanti.	6.5	No	Dumping	Obtained
12	Municipal Council Yavatmal	120763 Census 2001	Bembla River	30-11-1988 paid upto 30-11-2007	15MLD	7.20MLD	Not provided	To Bembla river	31 MT/D	Not provided	Dumping	31/12/2003 applied
13	Municipal Council Darwha	22360	Adan river	was valid upto 31-5-2003 not applied.	1500CMD	750CMD	Not provided	To Kupti river	06MT/D	Not provided	Dumping	Obtained
14	Municipal Council Digras	39169 Ccensus 2001	Dhanora river	was valid upto 28-2-2003 not applied	18000CMD	1440CMD	Not provided	To Dhanora river	10MT/D	Not provided	Dumping	Obtained

15	Municipal Council Umarkhed	34084 Census 2001	Painganga river,open well,bore well.	was valid upto 31-3-2002	1858.5 CMD	1470CMD	Not provided	To Painganga river	8.7 MT/D	Not provided	Dumping	Obtained
16	Municipal Council Pusad	67152 Census 2001	Pus river	was valid upto 30-06-1988 paid upto 31-10-03	4700CMD	3760 CMD	Not provided	To Pus river	15 MT/D	Not provided	Dumping	31/12/2003 applied.
17	Municipal Council Ghantanji	19047 Ccensus 2001	Waghadi river	was valid upto 31-1-2003 paid upto 31/01/2007	1000CMD	500CMD	Not provided	To Waghadi river	4.9MT/D	Not provided	Dumping	Obtained
18	Municipal Council Pnadharka- wda	26567 Census 2001	Khuni river	was valid upto 30/09/83 not applied.	27900CMD	5580CMD	Not provided	To Khuni river	6.5MT/D	Not provided	Dumping	Obtained
19	Municipal Council Wani	41968 Ccensus 1991	Nirguda river	was valid upto 30/4/87 Not applied	7000CMD	2000CMD	Not provided	To Nirguda river	11 MT/D	Not provided	Dumping	31/12/2003
20	Municipal Council Washim	62268 Census 2001	Ekburji dam	was valid upto 31-3-1985 paid upto 31-03-2004	5000CMD	1000CMD	Not provided	Ekburji dam d/s	16 MT/D	Not provided	Dumping	Obtained
21	Municipal Council Risod	27000 Census 2001	Open well, Risod lake.	paid upto 10-2006 but refused	1500CMD	900CMD	Not provided	Painganga river	07.0 MT/D	Not provided	Dumping	Obtained
22	Municipal Council Mangrulpir	27686 Census 2001	Motawana dam	was valid up to 31-1-1989 paid up to 31-03-2004	2430CMD	1458CMD	Not provided	Arunavati river	07.0 MT/D	Not provided	Dumping	Obtained
23	Municipal Council Karanja (lad) .	60000 Census 2001	Adan river	was valid up to 31-12-2002 paid upto	3150CMD	2260CMD	Not provided	Bembla river	15.50MT/D	Not provided	Dumping	Obtained

				31-12/2004								
24	Municipal Corporation Akola	400000	Katepurna dam at Mahan	31/12/85	45000	27000	no.	In Morana river	150	on biodegradable waste By M/s. Bhudan Organics.	50 T by processing 100 by dumping.	Obtained
25	Municipa Council Akot.	80000	Boar well Mohadi river	31/03/05	3850	2310	no	In Khai river	19	no		Obtained
26	Municipa Council Telhara	18906	Telhara Boar well	30/06/87	1000	600	no	In Gautama river	4.5	no	Dumping	Obtained
27	Municipa Council Balapur	39500	Man dam	31/12/88	3900	2340	no	In Man river	7.5	no	Dumping	Obtained
28	Municipa Council Patur	22000	Morna	28/02/87	1100	660	no	In Bordi river	04	no	Dumping	Obtained
29	Municipa Council Murtizapur	38851	Katepurna dam	31/08/04	2250	1350	no.	Purna river	10	no	Dumping	Obtained
30	Municipa Council Buldana	62989	Painganga river Yelgaon dam	28/02/90	3000	1800	no	Painganga river	500	no	Dumping	Obtained
31	Municipa Council Mehakar	37716	Koradi dam	31/12/85	1500	900	no	Painganga river	300	no	Dumping	Obtained
32	Municipa Council Chikhali	48500	Pentakli dam	31/12/93	1600	960	no	Jamuwanti river	400	no	Dumping	Obtained
33	Municipa Council Deulgaon Raja	24372	Parkalyan dam	Applied up to 31/03/05	1300	900	no	Amana river	200	no	Dumping	Obtained
34	Municipa Council Shindkhed Raja	13000	Parkalyan dam	31/03/05	8000	500	no	Khadakpur river	150	no	Dumping	Obtained
35	Municipa	20000	Lonar bore	Applied upto	1000	600	no	Lendi /	150	no	Dumping	Obtained

	Council, Lonar		well	31/10/2006				Ambar Talao				
36	Municipa Council, Malkapur.	61015	Purna river & Nalganga dam	31/03/88	4000	2400	no	Nalganga river	450	no	Dumping	Obtained
37	Municipa Council Nandura	45000	Dhyanangang a river Tandulwadi dam	31/12/83	2250	1350	no	Dhyanganga river	350	no	Dumping	Obtained
38	Municipa Council Jalgaon jamod	26000	Lendi nala (well)	30/11/87	1250	750	no	Purna river	210	no	Dumping	Obtained
39	Municipa Council Khamgaon	88670	Dhyananga river	31/12/90	4500	2700	no	Purna river	960	no	Dumping	Obtained
40	Municipa Council Shegaon	52000	Man river Lohara	30/11/87	2250	1350	no	Man river	400	no	Dumping	Obtained

Table - 16
Fly Ash generation & utilisation at Paras TPS.

Month	Ash Generation	Ash Utilisation	Ash utilisation
	MT	MT	in Percentage
April-04	8260	7195	87.11
May-04	8575	3595	41.92
June-04	6047	2010	33.24
July-04	9609	4020	41.84
Aug-04	9893	14036	141.88
Sept-04	10314	8472	82.14
Oct-04	9183	10724	116.78
Nov-04	10582	10560	99.79
Dec-04	9790	13440	137.28
Jan-05	10467	13680	130.07
Feb-05	4667	9664	206.85
Mar-05	4320	5002	115.79
Total	101706	102398	100.7

# **TASK AHEAD US:-**

- 1. Establishment of NAQAAM stations at Amravati.
- 2. Improving air quality of Wara Area.
- 3. Establishment of own offices at Akola & Amravati.
- 4. Commissioning of Common Treatment and Disposal facilities of Bio-Medical Waste at Akola.
- 5. Implementation of various rules at Municipal Corporation Akola.
- 6. Improving cess collection.
- 7. Improving stack & ambient air samples.
- 8. Increasing Revenues of Amravati Region around 1 Crore for 05-06.

-: END :-

# MAHARASHTRA POLLUTION CONTROL BOARD REGIONAL OFFICE, AMRAVATI

Phone No. 2662965 Shrikrishna peth
Fax No. 2662672 Daffrin road, Amravati
No. MPC/RO/AMT/ Date:

To, Member Secretary, M. P. C. Board, Mumbai.

Sub :- Environmental Status Report of Amravati Region from March-04 to March-05.

Ref :- Communication from M. S. office vide letter dtd. 02/09/05

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R/Sir,

This office has already submitted the environmental status report of Amravati Region for the year 2004-2005. Copy of the same is attached herewith for further necessary action please.

D. A.:- As above.

(V. M. Motghare ) Regional Officer, Amravati