

Ref: CPM/ENV/K-32/CF/03/07

Date: 17.11.2012

To
Dr. S C Katiyar
Scientist D, North Eastern Regional Office
Ministry of Environment & Forests, GOI
Law U-Sib, Lumbatngen, Near M T C Workshop
Shillong – 793 021

**Sub: Half Yearly Compliance Report on Environmental Stipulations.
(Period- April 2012 to September 2012)**

Sir,

Half Yearly Compliance report on Environmental Stipulations from April 2012 to September 2012 is hereby submitted enclosing the soft copy of the report for your kind perusal. The report is also being sent through email (moefner@dataone.in) and published in the web site of HPC.

Thanking you.

Yours faithfully
For & on behalf of HPC Ltd
Cachar Paper Mill

Enclo: as above (07 pages) & one soft copy.

(D. Banerjee)
Sr. Manager (Env & Civil)

Cc:

- i) The Director
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- ii) The Additional Director
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HINDUSTAN PAPER CORPORATION LTD
CACHAR PAPER MILL, PANCHGRAM
ENVIRONMENT DEPARTMENT

**Half yearly compliance report on environmental stipulations
Period- April 2012 to September 2012**

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Sl no	Environmental stipulations	Present status
01.	The project authority must strictly adhere to the stipulation made by the State Pollution Control Board and the State Government. A comprehensive EIA covering 4(Four) seasons data should be submitted to this Ministry latest by Dec'92	Comprehensive EIA Study 1996-1997 had been submitted to MOEF vide no. HPC/ENV/36-A/98/184 dtd. 09-03-1998.
02.	Expansion of the plant should not be taken up without prior approval of this Ministry.	No expansion has been taken up.
03.	The emission from various units should confirm to the standards prescribed by the Government or Central / State Pollution Control Board. At no time the emission levels should be beyond the stipulated standards. In the event of failure of any Pollution Control systems adopted by the units, the respective unit should be put out of operation immediately and not be restarted until the Control System are rectified to achieve the desired efficiency.	Emission monitoring of all the four boilers operating at Cachar Paper Mill are being done and reports are sent to APCB, CPCB & MoEF in every month. The reports are also available in the website of HPC. Monthly average report from April 2012 to September 2012 is enclosed as Table – I.
04.	The Project Authority should not change any design of stacks without the permission of the State Pollution Control Board. They will also provide close circuit grinding Unit in all the grinding sections of the Plant.	Design of stack has not been changed. Paper manufacturing process in the Mill does not include grinding process.
05.	A minimum of 4(Four) Air Quality Monitoring Stations should be set up in the downwind direction as well as where maximum ground level concentration is anticipated. Also stack emission should be monitored by setting up Automatic Stack Monitoring Unit. Air quality & Stack emissions should be monitored regularly. The data collected should be statistically analyzed, interpreted and report submitted to the State Pollution Control Board & this Ministry once in 6(Six) months.	Ambient Air Monitoring at 4 (four) monitoring stations has been continuing since September 2006 and reports are sent to APCB, CPCB & MoEF in every month. The reports are also available in the website of HPC. Monthly average report from April 2012 to September 2012 is enclosed as Table- II (A) & Table- II (B).

Sl no	Environmental stipulations	Present status
06.	At Nagaon fluidize bed boiler should be installed within 24(Twenty-four) months.	Not related to this mill. However, for our mill , installation of FBC Boiler is in progress. 81% erection job has already been completed.
07.	At Cachar, in case gas is available gas fired boiler should be installed within 24(Twenty-four) months instead of oil fired units.	Gas is not available for installation of gas fired boiler.
08.	Regular monitoring of Hydrogen Sulphide should be done and data should be statistically analyzed.	H ₂ S monitoring is regularly being done for Recovery stack and reports are sent to APCB, CPCB & MoEF in every month. The reports are also available in the website of HPC. Monthly average report from April 2012 to September 2012 is enclosed as Table-III.
09.	The liquid effluents generated should be treated so as to meet the prescribed standards of Central / State Pollution Control Board. The quality of liquid effluent should be monitored regularly and the data so collected should be statistically analyzed , interpreted and report submitted to this Ministry & State Pollution Control Board once in 6(Six) months .	The quality of liquid effluent is being monitored regularly and reports are sent to APCB, CPCB & MoEF in every month. The reports are also available in the website of HPC. Monthly average report from April 2012 to September 2012 is enclosed as Table- IV.
10.	Minimize, control foams in the aerated lagoons sprinkler system / fountain system should be installed within 24(Twenty-four) months.	Defoamer is used and foam is controlled.
11.	Action should be taken within 3(Three) years to remove the colour of the effluents before discharging.	This is also CREP requirement. IPMA was advised vide SI no. 6 of CREP to take up project with CPPRI for developing viable technology. Viable Technology is yet to be available. However the color is under control with great effort.
12.	Polishing pond should be desludged regularly.	Desludging activity of South Aeration Lagoon had been completed and the same is in operation from 12.06.2011.
13.	The Mercury level in the liquid effluents should meet the standards stipulated by the State Pollution Control Board. A Mercury Removal System should be installed to care of unforeseen circumstances.	Installation of Ion Exchange Mercury Removal System, removal of mercury from Hydrogen Gas & Caustic Lye, Mercury distillation units are in operation. The Mercury level in the liquid effluents is well within limit.

Sl no	Environmental stipulations	Present status
14.	Plan for proper disposal of solid wastes by way of value added materials should be drawn within months and submitted to this Ministry.	<p>Solid waste Disposal Plan had been submitted vide letter no. ENV/K-32/CF/09 Dtd. 21-12-2000.</p> <p>The area in the vicinity of the mill being flood prone, major solid waste like Coal Ash & lime grits are allowed to the locality for land filling of the interested party in their own patta land preferably developing of road and demand is very high.</p> <p>To reduce the quantity of Solid Waste generation and disposal measures taken are</p> <ul style="list-style-type: none"> a) To utilize bamboo dust as fuel a Bamboo Dust based Gasification Plant has been Installed & Commissioned in November 2006. b) A Lime Mud Re-burning Plant installation activities completed in March 2008. Commissioning will be done after the production of the mill is stabilized on sustainable basis. c) A Multifuel AFBC Boiler is being installed. 81% erection work has already been completed. Fly Ash generated in Coal fired boiler shall also be used as one of the fuels in AFBC Boiler.
15.	Ground water around the solid waste disposal pits should be regularly monitored for mercury contamination.	Ground water is being monitored weekly and the reports are sent to APCB, CPCB & MoEF in every month. The reports are also available in the website of HPC. Monthly average report from April 2012 to September 2012 is enclosed as Table –V.

TABLE - I
 STACK EMISSION DATA
Limit: PM 150 mg/Nm³

Monthly average values from April 2012 to September 2012

Source	CF Boiler I	CF Boiler II	CF Boiler III	Recovery Boiler
Months	PM mg/Nm ³	PM mg/Nm ³	PM mg/Nm ³	PM mg/Nm ³
April 2012	131.6	128.3	140.4	97.2
May 2012	131.4	124.8	138.3	84.5
June 2012	142.6	119.8	128.6	72.5
July 2012	135.3	127.8	140.4	86.2
August 2012	SHUT	136.1	129.7	77.4
September 2012	120.4	103.8	139.2	SHUT

TABLE – II (A)
 AMBIENT AIR QUALITY DATA
 Monthly average values from April 2012 to September 2012

Source	Time Office (Industrial)							
Parameter Limit Month	SPM 360 $\mu\text{g}/\text{m}^3$	PM10 100 $\mu\text{g}/\text{m}^3$	SO2 80 $\mu\text{g}/\text{m}^3$	NOX 80 $\mu\text{g}/\text{m}^3$	PM2.5 60 $\mu\text{g}/\text{m}^3$	Pb 1.0 $\mu\text{g}/\text{m}^3$	NH ₃ 400 $\mu\text{g}/\text{m}^3$	CO 4.0 mg/m^3
April 2012	165.5	66.2	3.5	12.8	-	-	-	-
May 2012	198.3	81.7	7.5	7.5	-	BDL	BDL	BDL
June 2012	197.6	71.0	5.6	7.1	-	-	-	-
July 2012	167.6	50.2	5.2	15.0	-	-	-	-
Aug`2012	249.6	66.5	3.7	17.5	-	BDL	BDL	BDL
Sept`2012	178.2	69.4	4.9	12.2	23.0	-	-	-

Source	Township (Residential)							
Parameter Limit Month	SPM 120 $\mu\text{g}/\text{m}^3$	PM10 100 $\mu\text{g}/\text{m}^3$	SO2 80 $\mu\text{g}/\text{m}^3$	NOX 80 $\mu\text{g}/\text{m}^3$	PM2.5 60 $\mu\text{g}/\text{m}^3$	Pb 1.0 $\mu\text{g}/\text{m}^3$	NH ₃ 400 $\mu\text{g}/\text{m}^3$	CO 4.0 mg/m^3
April 2012	133.7	48.8	BDL	5.3	-	-	-	-
May 2012	168.3	53.8	BDL	7.3	-	BDL	BDL	BDL
June 2012	115.6	36.4	BDL	6.1	-	-	-	-
July 2012	127.2	32.1	BDL	6.4	-	-	-	-
Aug`2012	160.7	26.5	BDL	4.0	-	BDL	BDL	BDL
Sept`2012	156.4	48.6	BDL	3.9	14.7	-	-	-

TABLE – II (B)
AMBIENT AIR QUALITY DATA
Monthly average values from April 2012 to September 2012

Source	Yard No.7 at Security Point (Industrial)							At corner of Lagoon (Industrial)						
Parameter	SPM	SO2	NOX	PM 2.5	Pb	NH ₃	CO	SPM	SO2	NOX	PM 2.5	Pb	NH ₃	CO
Limit	360 µg/m ³	80 µg/m ³	80 µg/m ³	60 µg/m	1.0 µg/m ³	400 µg/m ³	4.0 mg/m ³	360 µg/m ³	80 µg/m ³	80 µg/m ³	60 µg/m	1.0 µg/m ³	400 µg/m ³	4.0 mg/m ³
Month														
April`12	188.8	10.9	12.3	-	-	-	-	170.4	2.6	12.1	-	-	-	-
May`12	248.2	7.9	13.9	-	BDL	BDL	BDL	207.8	8.8	10.4	-	BDL	BDL	BDL
June`12	208.1	6.1	13.2	-	-	-	-	187.1	6.2	11.3	-	-	-	-
July`12	183.5	5.3	13.4	-	-	-	-	167.0	4.0	12.6	-	-	-	-
Aug`12	254.8	9.9	12.5	-	BDL	BDL	BDL	221.8	2.5	9.9	-	BDL	BDL	BDL
Sept`12	238.2	5.5	12.2	14.3	-	-	-	200.1	5.0	11.4	17.7	-	-	-

Cachar Paper Mill has no source of emission of Benzene, Nickel, Ozone, Arsenic & BaP.

TABLE - III
HYDROGEN SULPHIDE DATA
Limit: 10 mg/Nm³
Monthly average values from April 2012 to September 2012

Source	Month	Hydrogen Sulphide mg/Nm ³
Soda Recovery Stack	April 2012	8.1
--do--	May 2012	5.2
--do--	June 2012	6.6
--do--	July 2012	8.3
--do--	August 2012	9.4
--do--	September 2012	SHUT

TABLE - IV
TREATED EFFLUENT QUALITY DATA
Limit: SS 100 mg/l, COD 350 mg/l, BOD 30 mg/l
Monthly average values from April 2012 to September 2012

Month	SS mg/l	COD mg/l	BOD mg/l
April 2012	96	333	28
May 2012	94	327	27
June 2012	94	329	28
July 2012	92	330	27
August 2012	90	332	28
September 2012	95	326	28

TABLE-V
GROUND WATER QUALITY DATA
Monthly average values from April 2012 to September 2012

Parameter Months	LOCATION OF SAMPLING POINT			
	Well opposite to Adm. Building		Well near Railway station	
	p ^H	Mercury	p ^H	Mercury
April 2012	7.5	BDL	7.1	-
May 2012	7.1	BDL	7.3	BDL
June 2012	7.6	BDL	6.8	BDL
July 2012	7.1	BDL	7.4	BDL
August 2012	7.4	BDL	7.4	BDL
September 2012	7.0	BDL	7.0	BDL